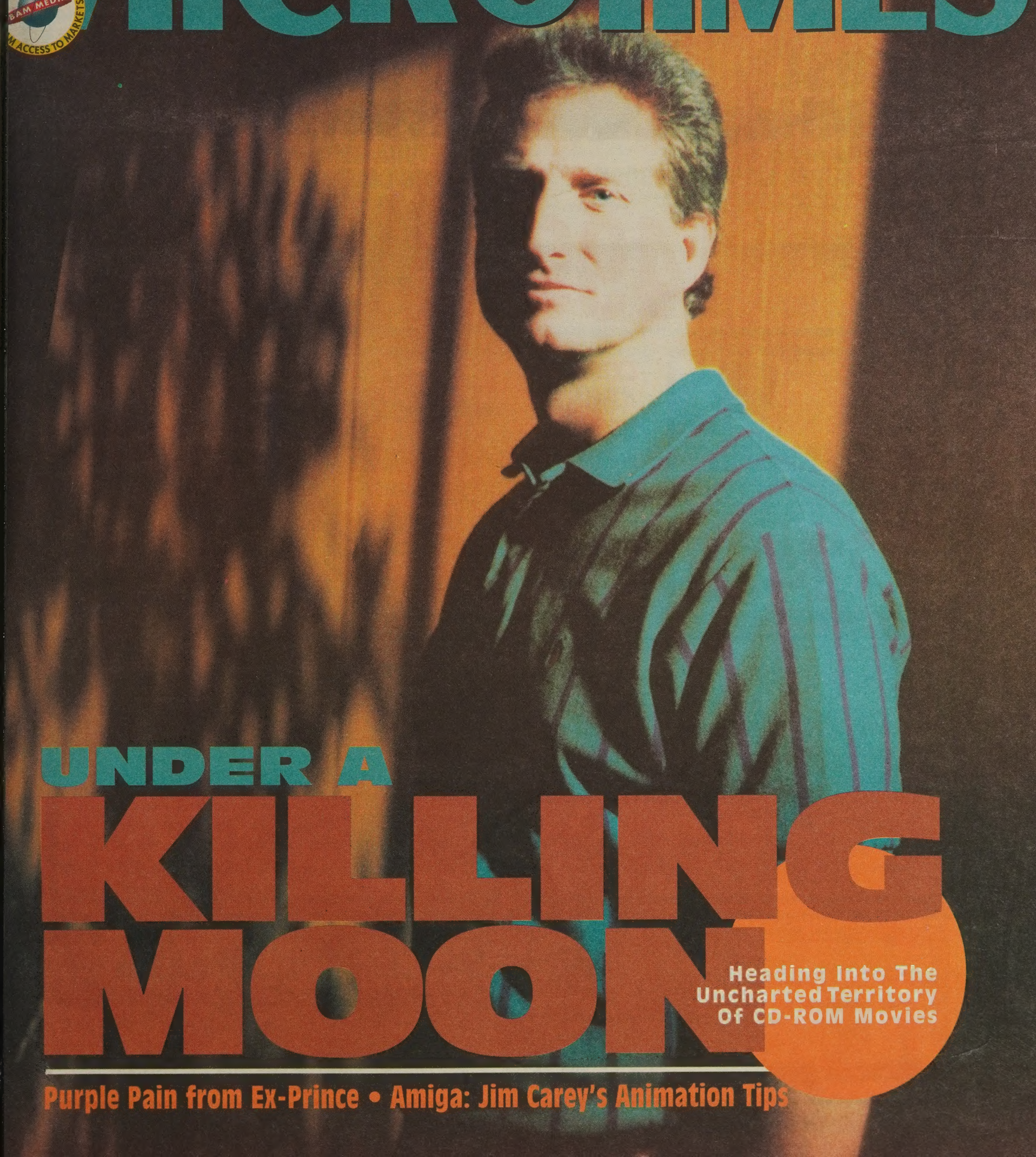
Northern California's Computer Magazine
August 24, 1994 • #126
FREE

MICROTIMES



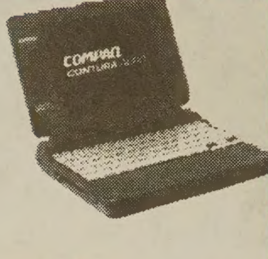
UNDER A KILLING MOON

Heading Into The Uncharted Territory Of CD-ROM Movies

Purple Pain from Ex-Prince • Amiga: Jim Carey's Animation Tips

COMPAQ

COMPAQ



486SL 25MHz
CONTURA AERO 4/25 170MB SUPER LIGHT NOTEBOOK

486SL 25MHz CPU • 170MB Hard Drive • 4MB RAM expandable to 12MB
Model does not include an integrated 3.5" 1.44 MB diskette drive EasyPoint Trackball
76-Key Keyboard
Integrated speaker
MS-DOS 6 Microsoft Windows
WinLink Transfer Utility with cable
Lotus Organizer TabWorks
Online Documentation
3 Year Limited Warranty
#1890695

$1499

COMPAQ

486SX 33MHz
CONTURA AERO 4/33C-170 170MB COLOR SUPER LIGHT NOTEBOOK

486SX-33MHz CPU • 170MB Hard Drive • 4MB RAM Expandable To 12MB
Passive Color • Model Does Not Include An Integrated • 3.5" 1.44 MB Disk Drive
EasyPoint Trackball
76-Key Keyboard
Integrated Speaker • MS-DOS 6
Microsoft Windows
WinLink Transfer Utility With Cable
Lotus Organizer • TabWorks
Online Documentation
#1902565

$2099

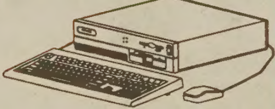
COMPAQ

486SX 33MHz
CONTURA AERO 4/33C-250 250MB COLOR SUPER LIGHT NOTEBOOK

486SX-33MHz CPU • 250MB Hard Drive
4MB RAM Expandable To 12MB • Passive Color
Model Does Not Include An Integrated • 3.5" 1.44 MB Disk Drive
EasyPoint Trackball • 76-Key Keyboard • Integrated Speaker
MS-DOS 6 • Microsoft Windows • WinLink Transfer Utility With Cable
Lotus Organizer • TabWorks • Online Documentation
#1902576

$2498

COMPAQ

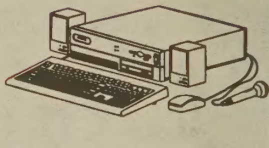


486SX 33MHz
PRESARIO 633 200MB SYSTEM

486SX-33MHz CPU • 200MB Hard Drive
4MB RAM expandable to 32MB Dual Floppy Drive • Mouse
Local BUS SVGA • 3 ISA expansion slots • Internal fax/modem
Preinstalled software: MS DOS • MS Windows 3.1
PFS: WindowWorks 2.0 • Delrina WinFax Lite • Prodigy
America On-Line • Symantec Games Pack • **Monitor Not Included**
#1866913

$997

COMPAQ

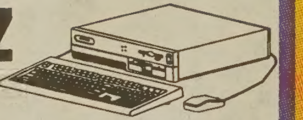


486SX 33MHz
PRESARIO 633 CDS 200MB MULTIMEDIA SYSTEM

486SX-33MHz CPU • 200MB Hard Drive • 4MB RAM expandable to 32MB
3.5" 1.44MB Floppy Drive • CD-ROM drive (dual-Speed) • Mouse
SoundBlaster 16 Audio Board • External speakers and microphone
Local BUS VGA • 2 ISA expansion slots • Internal fax/modem
Preinstalled software: MS DOS • MS Windows 3.1 • TabWorks
Microsoft Works • Prodigy • America On-Line MS Entertainment Pack
Symantec Games Pack
Delrina WinFax Lite
Monitor Not Included
#1866924

$1297

COMPAQ

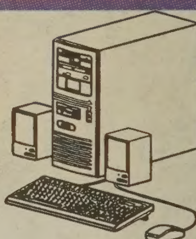


486SX2-66MHz
PRESARIO 660 340MB SYSTEM

486SX2-66MHz CPU • 340MB Hard Drive • 4MB RAM expandable to 32MB
3.5" Floppy Drive • Local BUS SVGA • 3 ISA expansion slots • Internal fax/modem
Preinstalled software: MS DOS • MS Windows 3.1 • PFS: WindowWorks 2.0 • TabWorks
Delrina WinFax Lite • Prodigy • America On-Line
MS Entertainment Pack
Monitor Not Included
#1910290

$1197

COMPAQ



486SX2-66MHz
PRESARIO 860 CDS MULTI-MEDIA SYSTEM

486SX2-66MHz CPU • 340MB Hard Drive • 8MB RAM
5 ISA expansion slots • Internal fax/modem
Preinstalled software: MS DOS • MS Windows 3.1
PFS: WindowWorks 2.0 • TabWorks • Quicken • WinFax Lite Prodigy • America On-Line • CompuServe • Encarta
Mayo Clinic Health
MS Entertainment Pack
Monitor Not Included
#1910315

$1599

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

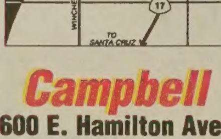
Fry's ELECTRONICS

Prices Good Through September 13, 1994

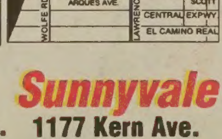
Limit Rights Reserved.
Not Responsible for
Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

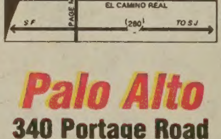
CORPORATE P.O. FAX #


S F
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD.
BASCOM
17
TO SANTA CRUZ

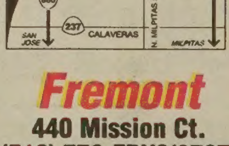
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S F
101
TO S J
FAIR OAKS
DUANE
OAKMEAD
STEWART DR.
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE.
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
WOLFE RD

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


S F
101
TO S J
PAGE MILL RD OREGON EXPWY
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT.
MISSION BLVD.
880
N. MILPITAS / WARM SPRINGS BLVD
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700

VISA
MasterCard

V

Thousands of Drives!! Stop by TODAY!!

DISK DRIVE DEPOT

GREAT PRICES

1000S OF DRIVES IN STOCK

Who Needs Optical?
You do. Here's why.

CSC COMPATIBILITY GUIDE
386/ 486/ Pentium PC
Apple Macintosh
IBM PS/2 SCSI
SUN Sparcstation
IBM RS6000
AS LOW AS
$795!

CSC carries all the contro cables, brackets and software you need for quick and easy installation

1.You get unlimited capacity.

Run out of room on your hard disk, and it's time to buy a new one. With optical, you just pop in another inexpensive cartridge.

2.You get portability.

You can slip 1,000 Megabytes in your shirt pocket or 10,000 megabytes in your briefcase. Optical cartridges are small, light, and rugged. Standard double sided 650MB and 1GB optical disks are used by thousands of major corporations and graphic service bureaus across the country. *They can read your disks now!* Millions of megabytes of databases, programs, and graphic files are shipped safely every day on optical media. Would you rather ship 25 SyQuest™ cartridges or one optical disk?

3.You get performance and reliability.

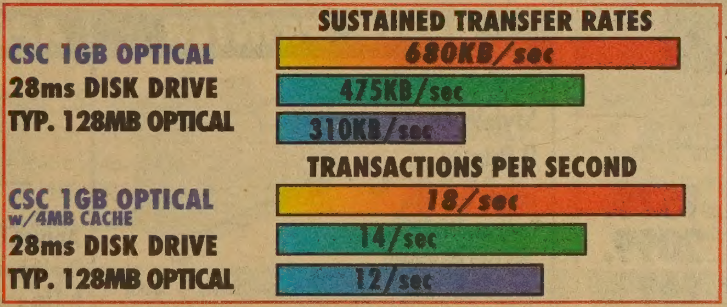
Optical technology is approaching the performance of hard disks. You can actually run programs from your optical drive with great performance. Experts in graphics design, digital audio and video insist on CSC optical drives.

4.You get the ultimate backup and retrieval system.

When your hard disk fills up, just off-load files to the optical drive. You can retrieve files instantly and you can *run programs from your optical drive.* Your only other reliable backup alternative is DAT tape. DAT works well, but it can take hours to backup and restore your files. And you'll never be able to run programs from a DAT tape.

If you're transporting large files, backing up critical data, working with an advanced operating system, or just plain out of hard disk space, *there's no substitute for a fast optical drive.*

What about performance?
CSC optical drives are chosen by disk technicians for top performance and reliability. We avoid small, low performance units. An optical disk drive's performance is rated in terms of transfer rate and transactions/sec.



THE CSC OPTICAL DISK FAMILY

1000MB	1000MB	1000MB	10GB JUKEBOX
256K cache	1MB cache	4MB cache	4MB cache
$1295	$1495	$1895	$5995

All drives above are brand new external SCSI units. Limited quantities of factory refurbished drives are occasionally available at even better prices! Media is sold separately. All 1000MB drives also read and write 650MB ISO standard disks. Quantities may be limited on some items!

NEW TAPE DRIVE BARGAINS

AS LOW AS
$189!
INTERNAL UNIT

The Depot has thousands of tape drives at unheard of prices. See us for the best values and selection on new drives. Even better prices are available on quality factory refurbished units. We have full and half height DAT drives in stock today!

NEW TAPE DRIVES*

WANGTEC 5099 QIC-36	$89
WANGTEC 5525ES SCSI-II	$189
1GB TANDBERG SCSI-II	$395
2GB TANDBERG SCSI-II	$649
NEW! 4GB SCSI-II DAT	CALL!
2GB WANGDAT SCSI-II	$549
2GB EXT CONNER SCSI-II	$695

*All capacities listed are honest unformatted tape capacities. We wouldn't mislead you by advertising "with compression" capacities. Data compression software offers a 2X compression ratio on most machines.

TECHNICAL EXPERTISE

That's what we have to offer that the others don't. All of our sales people have years of computer experience. If they can't answer your question, our customer service technicians can. Sorry but we do not have any beef jerky or candy bars. What we have is thousands of drives and the people to help you get the right one for you! Stop by soon!

ADVICE IS ALWAYS FREE!
STOP IN TODAY

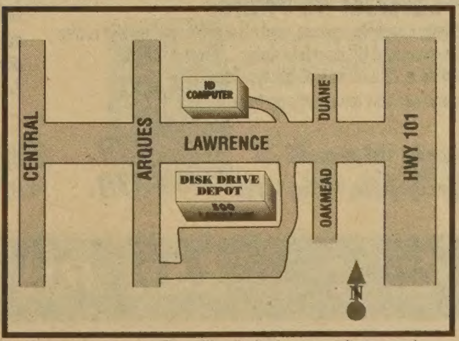
Disk•Drive•Depot

(408) 738-3895
FAX (408) 738-3896

500 Lawrence Expressway
Sunnyvale, CA 94086

STORE HOURS:
Monday-Friday 10:30am to 6:30pm, Saturday 11am to 6pm

Stop in and visit our retail showroom on Lawrence Expressway, opposite from HD Computer (on the South side of the street). Our service and selection are second to none.



All drives (both new and refurbished) are backed by the Disk Drive Depot's fast turnaround warranty. Quantities limited on most items, and prices are subject to change without notice. Trademarks listed are property of their respective owners.

WHOLE EARTH
ELECTRONICS

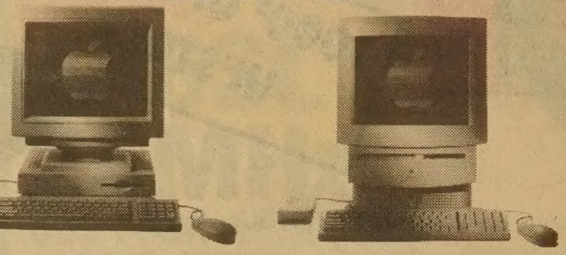
WHOLE EARTH ELECTRONICS

WAREHOUSE COMPUTER PRICING

APPLE® COMPUTER, PRINTERS AND PERIPHERALS

Apple® Performa® Computers

Authorized Reseller



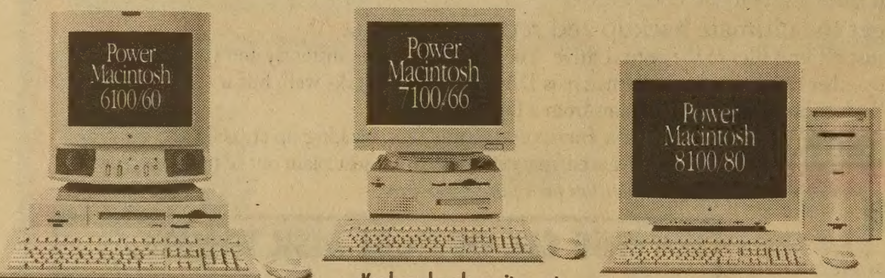
NEW!
at Whole Earth

THE REVOLUTIONARY PERFORMA!

INCLUDES EVERYTHING YOU NEED TO GET STARTED:

Apple® Performa® 475 4/160 HD Keyboard & Monitor Inlcuded	1299.
Apple® Performa® 550 5/160 HD/CD ROM Keyboard & Monitor Included	1599.

Apple® Power Macintosh™ Computers



Keyboard and monitor extra.

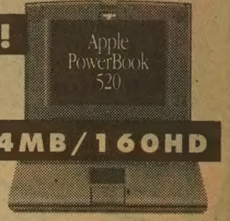
Apple Power Macintosh 6100/60 8MB/160HD	1579.
Apple Power Macintosh 6100/60 8MB/250HD/CD	2099.
Apple Power Macintosh 7100/66 8MB/250HD	2699.
Apple Power Macintosh 7100/66 8MB/250HD/CD	2899.
Apple Power Macintosh 8100/80 8MB/250HD	CALL
Apple Power Macintosh 8100/80 8MB/250HD/CD	CALL

©1994. Apple, the Apple logo, LaserWriter, LaserWriter Select, Macintosh, Macintosh Duo, Macintosh Quadra, Performa, PowerBook, PowerBook Duo, Newton, and Stylewriter are registered trademarks of Apple Computer, Inc. Apple CD, MessagePad, Power Macintosh and the light bulb logo are trademarks of Apple Computer Inc. PowerPC™ and the PowerPC logo™ are trademarks of International Business Machines Corporation, used under license therefrom. Windows is a trademark of MIcrosoft Corporation and SoftWindows™ is a trademark used under license by Insignia from Microsoft Corporation.

APPLE® POWERBOOK® COMPUTERS

Apple® PowerBook® 520 Computer

NEW!



4MB/160HD

Apple's most affordable new PowerBook computer. It offers innovative advances and a powerful advanced 50/25-megahertz Motorola 68LC040 processor — at a surprisingly low cost. Features a full-page-width, backlit FSTN monochrome display, built-in trackpad, 16-bit, CD-quality stereo sound and support for high-speed Ethernet networking. Completely upgradeable to PowerPC™ chip technology.

2095.

PowerBook 520C 4MB/160HD .... 2695. Limited Supply

Apple® PowerBook® 540 Computer

Apple PowerBook

NEW!

4MB/240HD

With an advanced 66/33-megahertz Motorola 68LC040 processor, the PowerBook 540 is the ideal system for power users on the go. This top of-the-line gray-scale computer provides a host of innovative advances including a built-in trackpad, support for high-speed Ethernet networking and upgradability to PowerPC™ chip technology. It has 16-bit, CD-quality stereo sound and a full-page-width, backlit, active-matrix display.

2999.

PowerBook 540C 4MB/320HD............ 4499.
Limited Supply

NEW!

Apple® Powerbook® 150 Computer

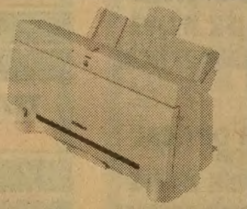
4MB/120HD

An all new Powerbook from Apple! With a powerful 4 MB of RAM and a 120 MB hard drive, you have all the power and room to take your work on the road.

1399.

APPLE® PRINTER

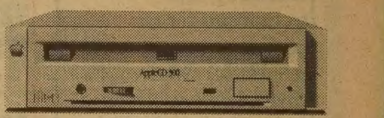
Apple® StyleWriter® II Printer



Ideal for business or home use It fits easily into even the smallest work spaces and can be put to work immediately — takes just one click of your mouse. **279.**

Apple® Color StyleWriter® Pro	599.
Apple® Personal Laserwriter® 320 Printer	899.
Apple® Laserwriter Select® 360 Printer (Limited Supply)	1499.

APPLE® MULTIMEDIA



AppleCD™ 300

The high-performance AppleCD™ 300 drive is the perfect tool for accessing the world of CD-ROM and multimedia. Access volumes of information and hundreds of images at speeds twice as fast as ordinary CD-ROM drives. **329.**

NEW!

Apple® Multimedia Kit for Macintosh® .... **429.**

PRINTERS

HEWLETT PACKARD

Affordable Laser

Affordable

HP LaserJet 4L Printer

Complete, simple to operate, and affordable, this printer is also the lowest priced HP laserJet Printer.....Ever! • 300 dpi resolution • 26 built-in scalable typefaces • EconoMode cuts toner costs up to 50% **649.**

HP Laserjet 4P Printer 600 dpi	979.
HP Laserjet 4 Plus Printer, 12PPM	1379.

HP LaserJet 4 ML Printer

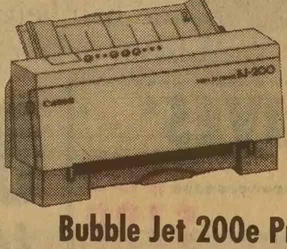
This postscript laser printer for the Macintosh comes standard with 4MB of memory and a lightening fast processor. Features auto-switching between Adobe® Postscript® Level 2 and enhanced HP PCL5 and 80 scalable typefaces, built-in Postscript, 35 Intellifont, 10 True Type (Windows). **999.**

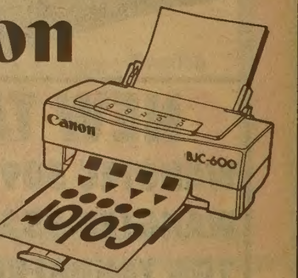
HP Laserjet 4MP Printer 600 dpi	1369.
HP Laserjet 4M Plus Printer, 12PPM	1969.

$30 REBATE

$30 REBATE

Canon





Bubble Jet 200e Printer

This quality printer delivers 360 dpi for laser-quality graphics and text. Its compact design makes it perfect for your home office. Features special energy saving Energy Star compliant feature and two year limited warranty.

Last Days! **269.***

Rebate ends 8/31/94.

BJC-600 Personal Color Printer

Prints 360-dpi on plain paper for brilliant color quality. Features a two-year limited warranty.

While Supplies Last **549.***

*After Manufacturer Rebate

Errors subject to correction.
Limited to stock on hand.

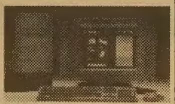
SAN JOSE 3530 STEVENS CREEK BLVD. 408-554-1500

WE MEAN BUSINESS!
WAREHOUSE COMPUTER PRICING

WHOLE EARTH ELECTRONICS

IN STOCK NOW! NEW FOR 1995!

INTRODUCING Packard Bell



1995 POWER TOWER MULTIMEDIA COMPUTERS

THE INDUSTRY'S MOST ADVANCED SYSTEMS!

NEW FOR 1995! WARP SPEED PENTIUM 90 MHZ PROCESSOR

- Multi-bus PCI, VESA local bus and ISA
- **1MB 32bit VideoRAM**, up to1280X1024 Hi Resolution Graphics.
- **32bit local bus IDE**, hard disk controller
- **Massive 810 MB hard drive**
- 8MB RAM & **256K level 2 write back cache** installed
- Intel Pentium overdrive ready for future HiSpeed Processors
- Double speed CD ROM & 16bit sound card, exceeds MPCII standard
- Enhanced parallel and serial ports with 16550 UART
- 3.5" 1.44MB floppy drive (Support to 2.88MB)
- Flash BIOS for ease of upgrading
- Expansion for up to 512K cache and 72MB Ram capacity
- Hi Speed 14.4 Data/fax/modem
- **11CD's, 27CD ROM Software Titles**
- One year on-site service and 24 hour, 7 day per week Technical Support! (Extended warranties available at Whole Earth)

PENTIUM - 90MHz 810MB Hard Drive $2899 Introductory Special Price

MAG INNOVISION

MX17F "Big Screen" Monitor

Superfine .26 Dot Pitch
- Extrordinary imaging that will meet your most demanding needs
- Digital Controls
- Resolutions up to 1280x1024 #DM17FG

NEW LOW PRICES

$799.

PC MAGAZINE EDITORS' CHOICE

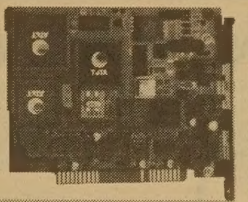
PC WORLD WORLD CLASS 1993

MX15F 15" Monitor
- 25% Greater Viewing Area
- Flat Square Screen Display
- SVGA, 1280x1024 resolution

Lowest Price Ever!

NOW ONLY $399.

FAX MODEMS



LOGICODE technology inc

Internal Fax Modem 96/48/24

Get on-line with this affordable fax modem. Includes a lifetime warranty. Made in the USA.

Blowout Pricing! **$29.99**

AT&T ***Chip Set Inside***

Internal 14.4 Class 2 $89.95

Upgradeable

Mac External $149.95

28.8 PC or Mac Internal New! $189.95

Fax Modem

Get on-line with this affordable fax modem. Access all the popular bulletin boards and services. Download useful programs and information. This reliable fax modem even lets you send and receive faxes right on your computer! Includes a lifetime warranty. Made in the USA .

NOTEBOOKS

IBM

120 MB HD

The ThinkPad 500 - From IBM®

The right size, the right power and the right price, the ThinkPad 500. With a 486slc 2/50 MHz processor, 3.5in floppy drive, PCMCIA slot, Trackpoint II pointing device, 4MB RAM and 170 MB hard drive all in a small 3.7 lbs., this notebook is designed for travel. A crisp, clear display and a ergonomically designed keyboard top off this unit. #260308N

YOUR CHOICE $1199. EACH

TOSHIBA

120 MB HD

Toshiba Portege™ T3400 Notebook

Introducing Toshiba's sub-notebook — the new standard in powerful portability. Features a 33MHz SL enhanced i486SX processor, 4MB RAM expandable to 20MB, an 8.4 inch STN-LCD mono display and a VESA local-bus hardware graphics-accelerated video controller.

IBM is a trademark of International Business Machines Corporation.

ACCESSORIES

System Connection

Mouse

Functional, ergonomic, and priced right. For DOS and Windows.

$9.95

ergodyne

Adjustable Foot Rest

This comfortable foot rest has simple height and angle adjustments. A convenient foot lever makes angle adjustments quick and easy and locks foot rest firmly into any position. #31100

$39.95

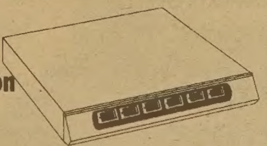
TARGUS

Leather Notebook Case

This leather case is specifically designed to carry a notebook style computer, related accessories and business documents. Constructed of full-grain cowhide, its features include a fully-adjustable, padded divider that separates the computer from the accessories. #CLN1

$99.95

System Connection

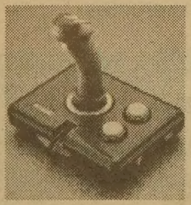


System Connection Power Center

Protect your investment against random power surges and spikes. Includes up-front on and off switches for your equipment.

$13.95

Advanced GRAVIS



The Standard for Macintosh Joysticks

You can set its five fire buttons and joystick to execute mouse clicks and keystrokes, or fire shots. This joystick has eight tension settings and is compatible with most Macintosh games..

$69.95

KENSINGTON.

Turbo Mouse 4.0

Includes a new software package that lets you customize cursor control. Features comfortably positioned, easy-to-press buttons and two ADB ports. It's System 7.0 compatible and comes with a limited lifetime warranty.

$114.95

SOFTWARE

Morphology 101

The tools, images and advice you need to create stunning digital movie magic.Includes the 33-page tutorial, PhotoMorph Lite, over 70 digital video clips, 300 images and Matinee to turn video clips into screen savers.

19.99

Interplay Monopoly

Now the best-selling board game is back and better than ever. This classic game is available as software for the Macintosh. Up to ten players.

19.99

AnyTime

This full-featured organizer lets you schedule appointments, keep track of names and manage to-do lists in a huge variety of layouts.

28.99

Jump The David Bowie

Interactive CD-ROM. A real-time video and audio editing adventure that expands on David Bowie's creative vision to bring you the interactive album of the future. You get to play music video director and record producer.

29.99

The Resident's Freak Show

An animated 3-D CD-ROM based on the music and stories of the world's best unknown musicians.

42.99

Errors subject to correction.
Limited to stock on hand.

SAN JOSE 3530 STEVENS CREEK BLVD. 408-554-1500

Contents

MICROTIMES™
August 24, 1994 • Issue #126

SILICON VALLEY MEETS HOLLYWOOD

COVER STORY

108
That's Entertainment: Personal Computer Getting Into Showbiz
BY DOUGLAS J. NAKAKIHARA
People and products at recent trade shows.

92
Under A Killing Moon: The Uncharted Territory Of CD-ROM Movies
BY MICHAEL ROBIN • COVER PHOTO: GREG ALLEN
An interview with Chris Jones of Access Software about his company's latest opus, an interactive adventure with Brian Keith, James Earl Jones, and Margot Kidder.

118
Total Clearance In The Intellectual Property Jungle
BY MARY EISENHART
Help for multimedia developers who want to enhance their products with préexisting movie and video footage.

News & Views

17
Industry Insight
BY PAUL HOFFMAN
Microsoft Settles With Feds 17
Cyrix/AST Deal Opens Up 486 Market 20
MicroTimes Stock Index. 22

28
Realizable Fantasies
BY JIM WARREN
Reality check on software piracy.

32
CyberWire Dispatch
BY BROCK N. MEEKS
The undead Digital Telephony appears certain to pass in Congress.

44
The Legacy Of Gary Kildall
BY JOHN WHARTON
A salute to the life, work, and spirit of Digital Research's late founder.

350
Dvorak's Last Column
A scene from the forthcoming musical comedy DWEEB!

Business Solutions

52
Pens & Palmtops
BY MITSU HADEISHI
New book: The PDA Playhouse

58
Laptops
BY ED KAHN
New hard drive for older laptops.

62
Accounting
BY DAVID A. SIMON, CPA, AND JENNIFER ROBIN CHERNISS
Windows-based personal accounting packages to help manage your books.

68
Telecommuting
BY ROBERT MOSKOWITZ
News from the telecommuting front.

76
Internet
BY JOHN S. QUARTERMAN, GRETCHEN K. PHILLIPS, AND SMOOT CARL-MITCHELL
The state of the Internet world, as evidenced by seven recent conferences.

82
UNIX
BY BENNETT FALK
The evolution of UNIX.

88
OS/2
BY FABIAN PASCAL
More on color printing.

90
Keeping Track Of Your Work Force
BY WOODY LISWOOD
ABRA 2000 human resources management system.

Features:

138
BMUG
BY DAVID MORGENSTERN
Back to school with BMUG.

148
Faxing From The Internet, Part II
BY KEVIN SAVETZ
New options for sending a fax via Internet mail.

206
Calendar Of Events
Computer Show & Sale 206
Seybold San Francisco 206
Online Developers Conference 206
Mentors In Schools Program Seeks Volunteers . 206

248
User Group Network
BBS column: Personal Freedom And The Online World

336
Classifieds

346
Index Of Advertisers By City

348
Index Of Advertisers

Micro Marketplace, A Special Advertising Section For Northern California Computer Buyers, Starts On Page 120

CommandLine Computers

The difference is experience.

FREE ON-SITE SERVICE IN THE BAY AREA
PURCHASE ORDERS ACCEPTED
FLEXIBLE FINANCING OPTIONS AVAILABLE

STATE OF THE ART MACHINE AMI SUPER VOYAGER

- 486 DX2-66/DX-33 Mainboard Made in USA
- Intel P-24T Support (ZIF Socket)
- 256K SRAM Cache
- 8MB RAM Expandable to 256MB
- 1.2 MB and 1.44MB Floppy Drive - Teac
- 540MB SCSI Maxtor 8.5ms Hard Drive
- Ultrastor VESA/SCSI Controller w/32K
- Hi- Transfer 16550-2 Serial/1 Parallel/ 1 Game Port
- Diamond Viper VLB 32Bit SVGA Card
- 15" 1024x768 SVGA Monitor, 0.28 DPI, NI
- Full Tower Case w/250W Power Supply
- Hi-Res Mouse
- 101 Key Enhanced Keyboard

ONLY **$3625/$3425**

or **$133/Mo/$125/Mo**

EISA/VESA/ISA

Pentium Ready

- 486DX2-66/DX-33 EISA/VESA/ISA
- Intel P-24T Support (ZIF Socket)
- 256K Cache Expandable to 1MB
- 4MB RAM Expandable to 128MB
- 1.2 MB and 1.44MB Floppy Drive - Teac
- 130MB Maxtor IDE Hard Drive
- 2FDD/ 2HDD IDE Controller
- 2 Serial, 1 Parallel,& 1 Game Port
- 32 Bit VLB Video Card w/1MB
- 14" 1024x768 SVGA Monitor 0.28 DPI
- Mini Tower Case w/200W P/S
- 101 Key Enhanced Keyboard
- Hi-Res Mouse

ONLY **$1640/$1425**

or **$60/Mo/$52/Mo**

CALL FOR CUSTOMIZED CONFIGURATION...

IBM SERVICE + QUALITY IBM 486 SLC2-50

- VESA Local Bus
- 3 Year Limited Warranty Mainboard Manufactured by IBM
- **IBM** 486 SLC2-50 CPU Licensed by Intel
- 16K Internal Cache
- 4MB RAM
- 1.2MB and .144MB Floppy Drive -Teac
- 170 MB Conner IDE Hard Drive
- IDE 2HDD/2FDD Controller
- 2 Serial, 1 Parallel, & 1 Game Port
- Orchid VLB 1280x1024 SVGA Card w/1MB
- 14" SVGA Monitor 1024x768 0.28DPI, NI
- Mini Tower Case w/ 200W PS
- 101 Key Enhanced Keyboard
- Hi-Res Mouse

ONLY **$1395**

or **$51/Mo**

USA MADE COMMANDLINE 486 VESA

- Intel 486 DX2-66/DX-33 VESA Local Bus
- 128K Cache
- 4MB RAM up to 32MB on Board
- 1.2MB & 1.44MB Floppy Drive - Teac
- 130MB Maxtor IDE Hard Drive
- IDE 2HDD/2FDD Controller
- 2 Serial, 1 Parallel, & 1 Game Port
- 32-Bit VLB SVGA Card w/1MB
- 14" SVGA Monitor 1024x768 0.28DPI
- Mini Tower Case w/ 200W PS
- 101 Key Enhanced Keyboard
- Hi-Res Mouse

ONLY **$1595/$1380**

or **$58/Mo/$50/Mo**

90 days same as cash or Three Year 100% financing available!

SAGER NOTEBOOK 700 - BIG POWER IN A SMALL PACKAGE

- NP740 (486SX-25)

$1650 (Mono)
$3225 Color(Active)

- NP743 (486DX-33)

$1850 (Mono)
$3450 Color(Active)

- NP746 (486DX2-66)

$2150 (Mono)
$3715 Color(Active)

Financing available on all notebooks!

Configurations:

- 4MB RAM expandable to 16MB
- Removeable 120MB Hard Drive (80, 200MB Optional)
- 3.5" 1.44MB Floppy Drive
- 10" Mono LCD VGA 640X480 64 Grays 10" Passive Matrix Color LCD VGA 640x480, 16 Colors 10" Active Matrix Color LCD VGA 640X480, 256 Color
- Simultaneous CRT & LCD Operation
- Large Built-In 16mm Trackball
- PCMCIA Type I & II Slot
- Ports for IS, IP, Ext, Keyboard/ Keypad,VGA monitor & AT/Bus for expansion box
- 83 Key Keyboard
- Nickel Metal-Hydride battery
- Microsoft DOS 6.0
- Carrying Bag & AC/ Adapter
- Weight 5.5lbs, with Battery
- 11.4"W X 8.6" D x 1.65"H
- Sager's Umbrella Protection Policy

Features:

- Module Pack Area: Trackball, Fax/Modem, SCSI, PS/2 Mouse+COM 2
- PCMCIA Slot
- Intel 486 Upgradeable CPU (486SX>486DX-33>486DX2-66)
- Easy to Upgradeable Memory (RAM) No need to Open Notebook
- 180° LCD Display Angle Rotation
- 2-Hour Quick Charge
- Expansion Box: 2 16-Bit Long Card, 13.5" HDD Bay
- NiMH Battery: No memory effect, Longer Battery Life
- External Battery Pack: Doubles Running Hours Screws Into Bottom Back of Notebook Raising & Angling Keyboard for Easy Typing

SAGER NOTEBOOK 800 - LOCAL BUS

- NP840 (486SX-25)

$1750 (Mono)
$3375 Color(Active)

- NP843 (486DX-33)

$1950 (Mono)
$3575 Color(Active)

- NP846 (486DX2-66)

$2250 (Mono)
$3850 Color(Active)

Configurations:

- Local Bus IDE & Local Bus VGA Display
- 4MB RAM expandable to 20MB
- Super Fast 120MB , Hard Drive (80, 200, 340MB Optional)
- 3.5" 1.44MB Floppy Drive
- 10" Mono LCD VGA 640X480 , 64Grays
- 10" Passive Matrix Color LCD VGA 640X480, 256 Colors
- Simultaneous CRT & LCD Operation
- Large Built-In 16mm Trackball
- 2 PCMCIA Slots
- Ports for 1S, 1P, Ext, Keyboard,VGA monitor & AT/Bus for Docking Station
- 86- Key Keyboard
- Microsoft DOS 6.0
- Carrying Bag & AC/ Adapter
- Weight 6.15lbs(with Battery)
- 11"W x 8.6"D x 1.77"H
- Sager's Umbrella Protection Policy

Features:

- Intel 486 Upgradeable CPU (486SX>486DX-33>486DX2-66)
- Upgradeable LCD Display: Mono > Passive (STN) > Active (TFT)
- 180° LCD Display Angle Rotation
- 2 PCMCIA Slots
- Flash ROM for BIOS Upgrade through software
- Intelligent Power Management (Automatically detects whether CPU is busy or not: When idle, CPU clock is automatically cut to low.)
- 2-Hour Quick Charge.

PATENTED NEW INNOVATION IN COMPUTER PROTECTION

- Prolongs the Life of your System
- Help prevent Hard Disk crashes
- Unlimited Surge Protection
- Brown-out and Overvoltage Protection
- Auto delay reboot after power interruption
- Electronic circuit Breaker
- EMI/RFI filters
- Decorative desk-top touch control
- 120 Watts output

$49 WITH SYSTEM PURCHASE (Actual $119 Value)

MiTAC 486SLC 33MHz

- 120 MB Notebook
- 1.44MB FDD, 4MB RAM
- S/P PORTS, MS DOS 5.0
- VGA Graphic, 5.5lbs

Only **$1375**

LIMITED SPECIAL

IBM PS VALUEPOINT
486 DX-33/ DX2-66

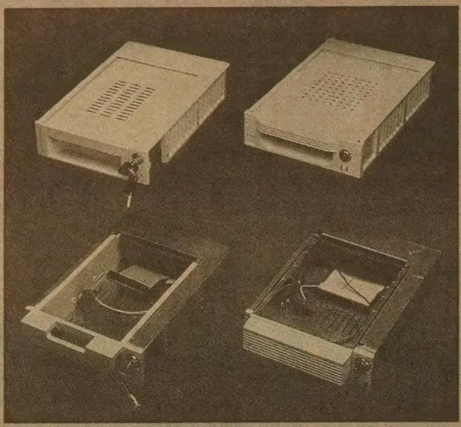
CALL FOR THE BEST PRICE!

CommandLine Computers Inc.

OPEN : M-F: 9-6, SAT: 10-4
921 Kifer RD, Sunnyvale, CA 94086
Bus:(408)735-7940
Fax:(408)735-7944 (Corner of Commercial and Kifer)

- 1 Year Parts Warranty, Lifetime Toll Free Technical Support, 30-day Money Back Guarantee Corp. 1000, University and Government PO's Are Welcomed!! No Surcharge on Visa or Mastercard
- Prices Subject to Change Without Notice
- Not Resposible for Typographical Errors
- All Opened Returns Are Subject To 15% Restocking Fee
- 14 Process Days for Purchase Refund

REMOVABLE STORAGE MODULES



FEATURES & OPTIONS:
- Supports most 3.5" hard drives
- IDE, or SCSI interfaces
- Hot removability
- Key lock ON/OFF security
- Fan cooling option
- Built-in SCSI ID selector switch option
- Ruggedized aluminum or low-cost plastic version
- Power/Drive activity LEDs
- Patent protected

RUGGED RACKMOUNT KEYBOARDS

- 19" rackmount keyboards
- 1U or 1.75" space
- 25 models
- Full travel and membrane types
- IBM PC XT/AT, PS2 compatible
- US and Intl. versions
- Spring-lock front panel
- Serial output 16mm, 2 button trackball

Call Elma at
510-656-3400

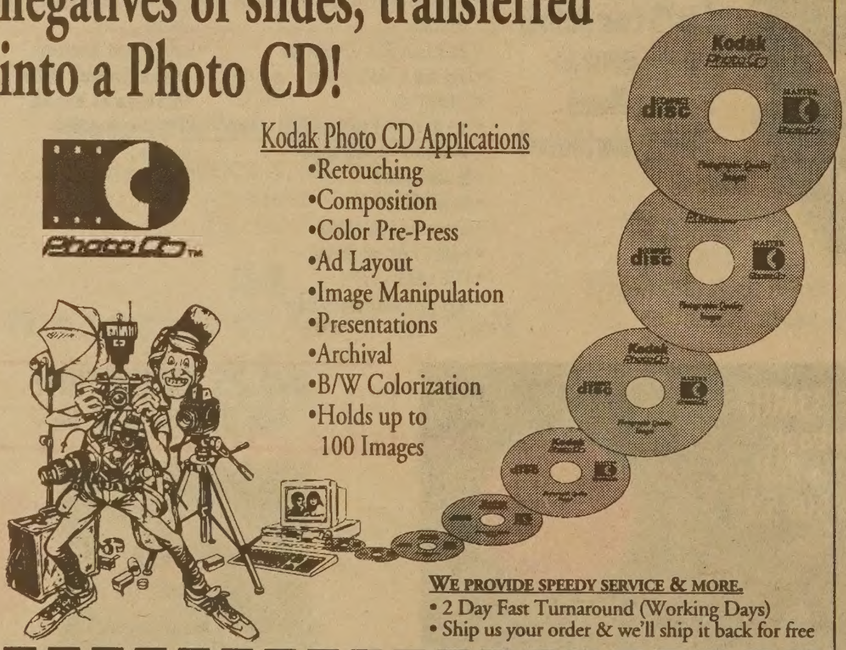
ELMA

ELMA Electronic Inc.
44350 Grimmer Blvd.
Fremont, CA 94538
Tel: (510) 656-3400
Fax: (510) 656-3783

Have your 35mm color or black & white negatives or slides, transferred into a Photo CD!

Photo CD™

Kodak Photo CD Applications
- •Retouching
- •Composition
- •Color Pre-Press
- •Ad Layout
- •Image Manipulation
- •Presentations
- •Archival
- •B/W Colorization
- •Holds up to 100 Images



WE PROVIDE SPEEDY SERVICE & MORE.
- 2 Day Fast Turnaround (Working Days)
- Ship us your order & we'll ship it back for free

$10 OFF! SPECIAL OFFER on your Photo CD Transfer!

Returning Customers Welcome!
Minimum $21 order.
Present coupon at time of order
Not to be used with any other offer
Offer expires 9/19/94
Get a FREE Photo CD Notepad with transfer order

ITS • CD IMAGE TRANSFER SYSTEM

ITS CD
Tel: 415-668-4688 • Fax: 415-668-4689
1845 Haight Street • San Francisco, CA 94117
(Next to Photo Motion, near Stanyan St.)
Hours: 10AM to 7PM Daily
DISCOVER VISA MasterCard

Contents MICROTIMES

Product Spotlight

166
Product Updates

New Products

LAN Hardware

LCI Althernet 166
Silicom LAN Packet Adapters 166

Book

Hard Drive Bible, Seventh Edition 168

Mac Software

HSC KPT Bryce 1.0 168
Extensis PageTools 168
TrapMaker 168

PC Software

Crystalogic Crystal VM 168
RISK+ 168

Reviews

Games

Buzz Aldrin's Race Into Space 172
Gobliiins 172
Lower Your Score With Tom Kite 172

Telecommunications

Konexx Koupler 174

Newton Software

Time Reporter 174

Book

Morphing On Your PC 174

Amiga Hardware

Retina BLT Z3 320
Toccata 320

Amiga Software

LightWave Organic Modeling 322

Multimedia & Beyond

269
Multimedia 101
BY JONATHAN E.
Purple Pain—ex-Prince and the pitfalls of CD-ROM. Also, Gulch Gossip.

280
Amiga
BY DOUGLAS J. NAKAKIHARA
A visit with animation wizard Jim Carey.

290
Desktop VR: Under The Hood
BY TONY REVEAUX
Unusual approach by Cyberscope 3D.

Domino® COMPUTER

BUILD YOUR OWN COMPUTER - WITH OUR TRAINED TECHNICIANS

YOU BUILD
Domino COMPUTER

OR

HAVE IT YOUR WAY!

DOMINO WILL CUSTOM BUILD YOUR COMPUTER FOR YOU

WE BUILD
Domino COMPUTER

MULTIMEDIA BUNDLES

- Sony 33A Dual Speed CD-ROM Drive (w/Kit)
- Sound Blaster 16 Sound Card
- **6 CD Title Bundle:** The Animals, US Atlas, World Atlas, Multimedia Encyclopedia, Chess Master and Mavis Beacon Teaches Typing.

$289

- Toshiba 3401B CD-ROM
- Pro Audio Spectrum 16 or Sound Blaster 16 SCSI
- 6 CD Titles

$485

COMPUTER UPGRADE KITS

Intel 486SX/33MHz	$365
Intel 486DX/33MHz	$535
AMD 486DX/40MHz	$505
Intel 486DX2/50MHz	$555
AMD 486DX2/66MHz	$595
Pentium 60MHz	$CALL
Pentium 90MHz	$CALL

Upgrade Kits Include: 486 VESA Local Bus Motherboard w/CPU with 128K Cache Memory, 4MB SIMM RAM and in-store installation assistance. Full installation is also available for a small fee.

SPECIALS

PENTIUM $2795

- INTEL PENTIUM 60MHZ CPU
- PENTIUM PCI MOTHERBOARD
- 256K RAM CACHE
- 8MB 72PIN SIMM RAM
- 420MB IDE HARD DRIVE
- 1.2MB & 1.44MB FLOPPY DRIVES
- PCI IDE CONTROLLER
- 17" SVGA MONITOR
- PCI WINDOWS ACCELERATOR W/1MB
- 101 KEY ENHANCED KEYBOARD
- 2 SERIAL, 1 PARALLEL & 1 GAME PORT
- 3-BUTTON MOUSE
- MS-DOS 6.2 AND WINDOWS 3.1
- MID TOWER CASE W/250W PS

PARTS

SVGA Monitor & Video Card	$245
245MB HD	$CALL
340MB HD	$CALL
96/24 Fax/Modem	$35
14.4/14.4 Fax/Modem	$95
250MB Tape Backup	$165
16-Bit NIC Ethernet Card	$59
386DX/40 MB w/CPU	$109
486 VESA Local Bus	$115
Pentium VLB	$CALL
Pentium PCI	$CALL

486SX/33 COMPLETE SYSTEM

- Local Bus Motherboard
- 4MB/128K Cache Exp.
- 200MB Hard Drive & IDE Controller
- 1.44MB Floppy Drive
- 14" SVGA Monitor & SVGA Card
- Mini Tower Case w/230W PS
- 101 Keyboard
- 2 Serial, 1 Parallel & 1 Game Port
- MS-DOS 6.2 w/ Manual
- 3-Button Mouse w/Pad

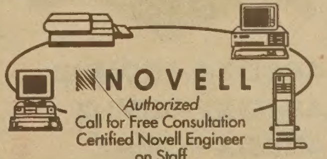
$985

CORPORATE CUSTOMERS: ON-SITE MAINTENANCE CONTRACTS

CALL FOR FREE ON-SITE EVALUATION

(ALSO ON-SITE UPGRADES & REPAIRS)

WE SPECIALIZE IN NOVELL AND UNIX NETWORKS



NOVELL
Authorized
Call for Free Consultation
Certified Novell Engineer on Staff

SELF SERVICE CENTERS

BERKELEY/EMERYVILLE
1552 BEACH ST. STE. B
510/653-6286

MILLBRAE
231 MILLBRAE AVE. STE. 101
415/259-8080

SAN FRANCISCO
3400 GEARY BLVD.
415/668-9311
OPEN SUNDAY

CONCORD
1130D BURNETT AVE.
510/682-8934

MILPITAS
976 HANSON COURT
408/946-6991

SAN RAFAEL
757 LINCOLN AVE. STE. 30
415/453-8525

LOS ALTOS
307 SECOND ST.
415/941-7778

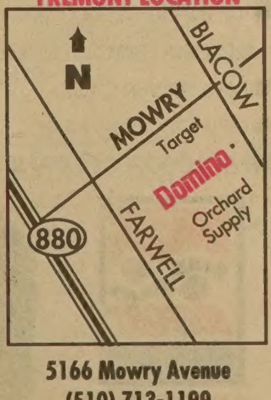
***SAN RAMON**
2217 SAN RAMON VALLEY BLVD. STE. C
510/820-6022

VALLEJO-NAPA
480 REDWOOD ST. STE. 12
707/644-5055
OPEN SUNDAY

SANTA ROSA
1740 SANTA ROSA AVE.
707/523-2055

CLEARANCE CENTER
408/749-0217

NEW! FREMONT LOCATION



5166 Mowry Avenue
(510) 713-1199

*Novell Certified Netware Engineer

BUSINESS SOLUTION CENTERS

***BLOSSOM HILL**
461 Blossom Hill Rd., Ste. H-1
(408) 363-1800
FAX (408) 363-1803

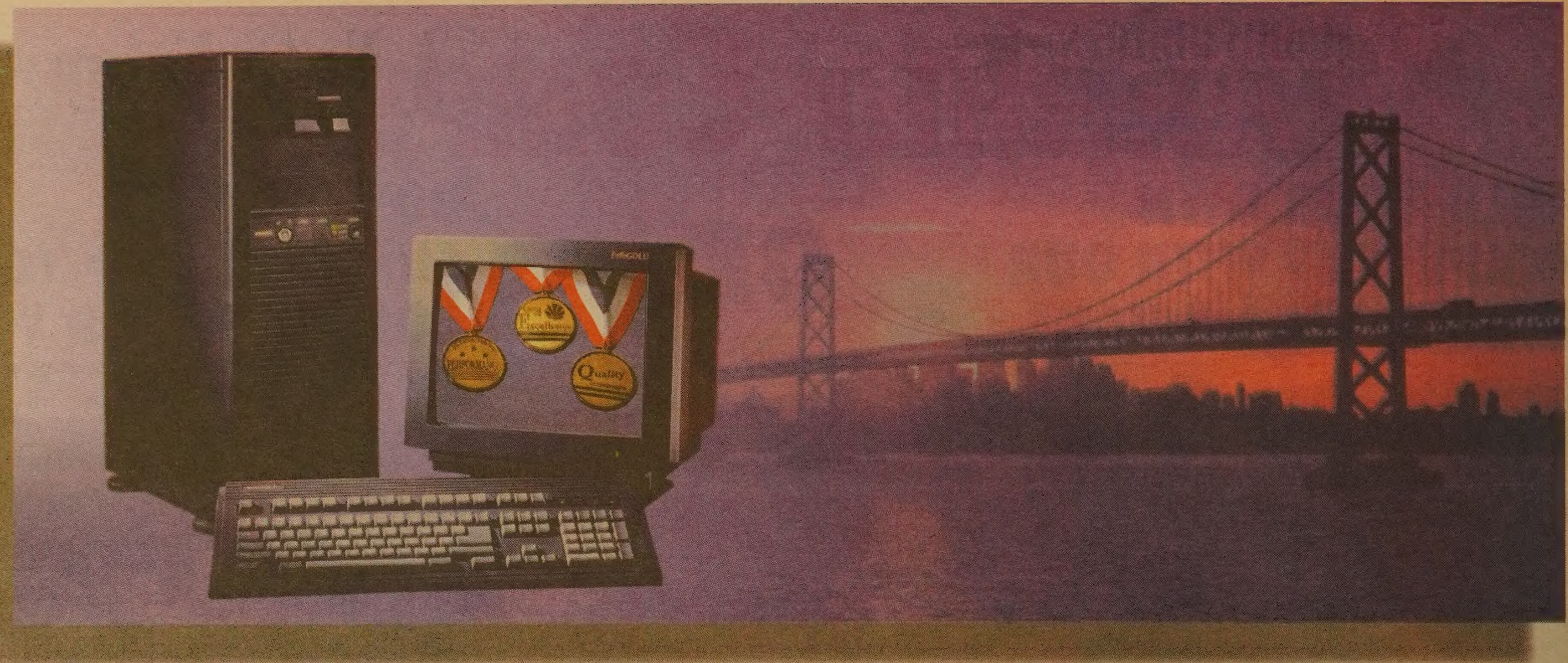
OAKLAND
1238 Harrison Street
(510) 839-1800
FAX (510) 839-1818

***FREMONT**
5166 Mowry Ave.
(510) 713-1199
FAX (510) 713-1193

***PLEASANTON**
6700 Santa Rita, Ste. D
(510) 847-1771
FAX (510) 847-1712

SUNNYVALE
1214 Apollo Way
Ste. 404-2
(408) 749-0217

Domino® COMPUTER
Your Neighborhood Workshop
Service and Upgrade Center



PC MAGAZINE

EDITORS' CHOICE

"Overall value excellent ....PC Magazine"

BEST BUY USA

● 486DX4-100MHz	$ 1,495
● 486DX2-66MHz	$ 1,155
● 486DX-40MHz	$ 1,085

FEATURES: #3650

FREE Power Saving "Green PC" Upgrade

- 128K CACHE
- 4MB RAM
- 210MB IDE HARD DRIVE
- 1.44MB TEAC FLOPPY DRIVE
- VESA LOCAL BUS S-VGA CARD W/1MB
- VESA LOCAL BUS CONTROLLER CARD
- 2 SERIAL, PARALLEL, GAME PORTS
- 101 ALPS ENHANCED KEYBOARD
- 14" INFOGOLD2000 MONITOR 0.28DPI - HITACHI PICTURE TUBE
- MINI TOWER CASE
- CPU COOLING FAN
- MICROSOFT COMPATIBLE MOUSE

Terms and Conditions :

AMS accepts VISA, MC, Money Orders, Cashier Checks, P/O's, Wire Transfers. One Year Warranty on Parts & Labor. 30 Day Satisfaction Guaranteed. All returns are subject to approval. 15% restocking fee. Add $3.00 per box for handling plus shipping charges. COD, $4.00 per box. All prices subject to change without notice. Not responsible for typos.

Windows SOURCES

InfoGOLD

GO FOR THE GOLD

MULTI-MEDIA SYSTEM

486 DX2-66 $ 1,455

FEATURES: #3700

FREE Power Saving "Green PC" Upgrade

- 128K CACHE
- 4MB RAM
- 210MB IDE HARD DRIVE
- 1.44MB TEAC FLOPPY DRIVE
- VESA LOCAL BUS S-VGA CARD W/1MB
- VESA LOCAL BUS CONTROLLER CARD
- 2 SERIAL, PARALLEL, GAME PORTS
- SONY DOUBLE SP. CD-ROM
- SOUND BLASTER 16-BIT SOUND CARD
- STEREO SPEAKERS
- MULTI-MEDIA CD-PACKAGE, INCL: MULTI-MEDIA ENCYCLOPEDIA, WORLD ATLAS, US ATLAS, MAVIS BEACON TEACHES TYPING, CHESS MASTER 4000, THE ANIMALS
- 101 ALPS ENHANCED KEYBOARD
- 14" INFOGOLD2000 MONITOR 0.28DPI - HITACHI PICTURE TUBE
- MINI TOWER CASE
- CPU COOLING FAN
- MICROSOFT COMPATIBLE MOUSE

24HR. ONLINE SUPPORT

CALL FOR OTHER UPGRADE OPTIONS !

SONY CONNER DIAMOND

BYTE

A McGRAW-HILL PUBLICATION

"An excellent choice ..... PC Magazine"

● PENTIUM	90MHz PCI	$ 2,255
● PENTIUM	66MHz PCI	$ 2,055
● PENTIUM	60MHz PCI	$ 1,895
● 486 DX2	66MHz VLB	$ 1,425

FEATURES: #3150

QUALITY

FREE Power Saving "Green PC" Upgrade

- 256K CACHE
- 8MB RAM
- 420MB IDE HARD DRIVE
- 1.44MB TEAC FLOPPY DRIVE
- PCI LOCAL BUS WINDOWS ACCEL. CARD
- PCI LOCAL BUS CONTROLLER CARD
- 2 SERIAL, PARALLEL, GAME PORTS
- 101 ALPS ENHANCED KEYBOARD
- 14" INFOGOLD3000 NON-INTERLACED MONITOR 0.28DPI - HITACHI TUBE
- FULL SIZE TOWER CASE
- CPU COOLING FAN
- MICROSOFT COMPATIBLE MOUSE

DESKTOP PUBLISHING

Affordable high-resolution 36-bit scanning !!

1-1.8Gb Hard Drives on Sale

HIGH-END DESKTOP PUBLISHING / CAD SYSTEMS AVAILABLE ON REQUEST !

DTP *SONY/NANAO* MONITORS ,SCANNERS, PRINTERS

SOFTWARES: ALDUS PAGEMAKER ,ADOBE PHOTOSHOP ADOBE ILLUSTRATOR , QUARK EXPRESS

COME IN FOR DEMONSTRATION !

special

Serving Corporate Customers since1986 such as: United Nations, 3COM, U.S. Government, Weitek, General Motors, Ohio State University, Chevron, Siemens, and more......

American Multisystems AMS
538 Oakmead Parkway,
Sunnyvale, CA94086, USA
TEL : 408.524.9091
FAX : 408.524.9099

InfoGOLD

Contributors MicroTimes

John Wharton, who wrote the commemoration of Gary Kildall in this issue, is an independent computer design consultant, analyst, and free-lance writer based in Palo Alto, CA. He also lectures in Electrical Engineering at Stanford University and writes occasional columns for *Microprocessor Report* newsletter. John once worked as an applications engineer and processor architect at Intel, and first got to know Gary Kildall while acting as chief technical liaison between Intel and Digital Research.

For the last year John has been attempting to complete an 800-page in-depth analysis of the 386-, 486-, and Pentium-class microprocessors sold by Intel, AMD, Cyrix, and IBM. The report should be published in Q4, John says—though the list of chips to be covered keeps gaining on him.

Jonathan E. has worked with desktop multimedia since 1988. He also writes about world music and the Archaic Revival for *BAM*. His USPS mailing address is c/o SoundSwell, 54 29th St., Richmond, CA 94804. His email address is jeve@well.sf.ca.us .

Smoot Carl-Mitchell, Austin, TX-based writer and consultant, is the managing partner of TIC (Texas Internet Consulting) and president of MIDS (Matrix Information Directory Services).

Bennett Falk works at Sybase and is the author of *The Internet Roadmap*, published by Sybex Books and due in a new edition real soon now.

Kathleen Creighton is a longtime observer of the online scene. You can reach her at casey@well.sf.ca.us .

Jennifer R. Cherniss specializes in making boring technical information seem less so. She can be reached at (510)893-5753.

John C. Dvorak is a much-published columnist heading for Broadway.

Mitsu Hadeishi is the owner of Open Mind Systems in Ashland, OR.

Fred Haslam is an independent programmer based in the Bay Area. His most recent project was coauthoring SimCity 2000.

Woody Liswood is a consultant and human resource specialist living in Colorado.

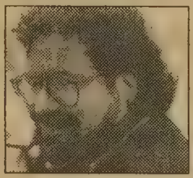
Paul Hoffman is an independent consultant who's been writing about computers for over fifteen years.

Ed Kahn is a writer and consultant based in Pinole.

Matthew Leeds is a networking czar at Brøderbund.

Brock N. Meeks, returning to our pages after a long absence, is a Washington, DC-based correspondent for *Communications Daily*.

Pamela Mason is a free-lance writer and consultant. She is currently developing animation and multimedia applications. She can be reached on America Online: PMason.



David Morgenstern works at *MacWeek* and volunteers at BMUG.

Mark Will is a free-lance writer based in Whittier. He can be reached on CompuServe (70413,53).

Robert Moskowitz is a consultant based in Woodland Hills, who writes frequently on productivity, office automation, and technology. He is president of the American Telecommuting Association, a membership organization serving the needs of telecommuters and those who want to become telecommuters.

Fabian Pascal is a San Francisco independent consultant, teacher, and writer specializing in relational database management. An industry analyst, he teaches seminars, consults, and has published extensively. He is author of *SQL and Relational Basics* (M&T Books, 1990) and *Understanding Relational Databases* (John Wiley, 1993). He can be reached on MCI Mail (FPascal), CompuServe (73677,3306), or at (415)776-5184.

Douglas J. Nakakihara is a CPA by trade and an Amiga enthusiast by inclination.

John S. Quarterman, senior technical partner of TIC (Texas Internet Consulting) and editor of *Matrix News*, is a longtime observer, consultant, and writer on the matrix of electronic networks.

Tony Reveaux, a San Francisco consultant, is a columnist for *Film/Tape World*.

David A. Simon, CPA (M.S., Taxation) has a tax and accounting practice in Oakland, and is coauthor of *Business Contracts: Forms and Tax Analysis* (Wiley Law Publications). He can be reached at (510)893-5753.

Jim Warren organized and chaired the First Conference on Computers, Freedom & Privacy (1991), received the Electronic Frontier Foundation Pioneer Award in its first year (1992), led the recent successful effort to make state legislation and statutes available via the public nets without state charge, and received the James Madison Freedom-of-Information Award from the Society of Professional Journalists—Northern California (1994). He also serves on Autodesk's board of directors.

A Note From The Editor

MicroTimes Joins Mercury Center

We're happy to announce that starting with this issue, *MicroTimes* is a part of Mercury Center on America Online, the nation's fastest-growing online service. Now, even if you live outside our California distribution area, you'll be able to read stories, columns, product reviews, and other timely information.

As an example of our no-extra-cost value-added, we'll soon be featuring our advertising online as well, bringing world-class computer shopping resources to computer users across the country.

If you're already on AOL, use keyword "Mercury" and follow the menus to the MicroTimes area. If you're not on AOL yet, call 408-297-8495 for a free signup kit.

We look forward to working with you in cyberspace!

—MicroTimes editors

Express Yourself!

Send Letters to the Editor to us at these addresses:

US Mail:
Letters, MicroTimes,
3470 Buskirk Avenue, Pleasant Hill, CA 94523
fax: (510)934-3958
Internet: microx@well.sf.ca.us
MCI: MicroTimes
America Online: MicroTimes

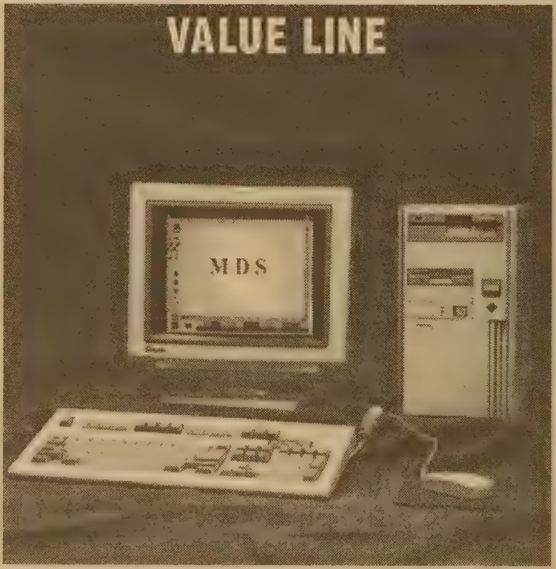
MDS COMPUTER INC.

UP GRADE WITH MDS

POWERFUL DESKTOPS AT THE LOWEST PRICES!

MULTIMEDIA UPGRADE KITS

Toshiba XM3401B Int.	Panasonic CR 562 Int.	Media Magic Multimedia	NEC Triple Speed
(200ms, 300kb/sec) Sound Blaster 16 SCSI-2	(320ms, 300kb/sec) Sound Blaster 16 Basic	•Sony CDU33A Int. • Media Magic ISP-16 •4 CD Titles • Quickshot Speakers	CDR 510 • 450kb/Sec • 195ms Access Time
$465	$255	$289	$350


VALUE LINE

MDS 486 VALUE LINE PC
(4MB RAM/170MB Hard Disk/128K/14")

- Intel 486SX/DX/DX2 Processor
- 486 ISA & VLB Motherboard w/128K Cache
- 3 VLB & 7 16 Bit ISA Slots
- 4MB RAM (SIMM 1MBx3-70ns)
- Teac 1.44MB (3-1/2") Floppy Drive
- 170MB IDE Hard Drive
- 16-Bit IDE Controller Card
- Trident SVGA Display Card w/1MB
- 14" Color SVGA Monitor (1024x768)
- Mini/Desktop Case w/220 Watt Power Supply
- 101 Enhanced Soft/Click Keyboard
- MDS Serial Mouse w/Mouse Pad
- MS DOS 6.2 & Windows 3.11

BACK TO SCHOOL SPECIAL!

486SX-25MHz **$829**
486SX-33MHz **$859**
486DX-33MHz **$999**
486DX2-66MHz **$1059**

MDS 486 VLB VALUE LINE PC
(4MB RAM/340MB Hard Disk/256/14")

- Intel 486DX/DX2 Processor
- 486DX 256K VLB M/B w/Pentium Zif Socket
- 3 VLB & 7 16 Bit ISA Slots
- 4MB RAM (72-Pins SIMM-70ns)
- Teac 1.2MB (5-1/4") & 1.44MB (3-1/2") Floppies
- 340MB IDE Hard Drive
- 32-Bit VLB IDE Controller
- 14" Non-Interlaced SVGA Monitor (1024x768, .28mm)
- Middle Tower Case w/250 Watt Power Supply
- 2 Serial, 1 Parallel & 1 Game Ports
- 101 Enhanced Soft/Click Keyboard
- MDS Serial Mouse w/Mouse Pad
- MS DOS 6.2 & Windows 3.11

486DX-33MHz **$1199**
486DX2-66MHz **$1259**

MDS 486 VLB WIN STATION
(8MB RAM/420MB Hard Disk/256/15")

- Intel 486DX/DX2 Processor
- 486DX 256K VLB M/B w/Pentium Zif Socket
- 3 VLB & 7 16 Bit ISA Slots
- 8MB RAM (72-Pins SIMM-70ns)
- Teac 1.2MB (5-1/4") & 1.44MB (3-1/2") Floppies
- 420MB IDE Hard Drive
- 32-Bit VLB IDE Controller
- Orchid Kelvin 64 VLB Win Accelerator w/1MB DRAM
- 15" Non-Interlaced Flatscreen Monitor (.28mm)
- Middle Tower Case w/250 Watt Power Supply
- 2 Serial, 1 Parallel & 1 Game Ports
- 101 Enhanced Soft/Click Keyboard
- MDS Serial Mouse w/Mouse Pad
- MS DOS 6.2 & Windows 3.11

486DX-33MHz **$1589**
486DX2-66MHz **$1629**

MDS 486DX4 WIN STATION
(8MB RAM/420MB Hard Disk/256/15")

- Intel 486DX4 Processor
- 486DX4 256K VLB M/B w/Pentium Zif Socket
- 3 VLB & 7 16 Bit ISA Slots
- 8MB RAM (72-Pins SIMM-70ns)
- Teac 1.2MB (5-1/4") & 1.44MB (3-1/2") Floppies
- 420MB IDE Hard Drive
- 32-Bit VLB IDE Controller
- Orchid Kelvin 64 VLB Win Accelerator w/2MB DRAM
- 15" Non-Interlaced Flatscreen Monitor (.28mm)
- Middle Tower Case w/250 Watt Power Supply
- 2 Serial, 1 Parallel & 1 Game Ports
- 101 Enhanced Soft/Click Keyboard
- MDS Serial Mouse w/Mouse Pad
- MS DOS 6.2 & Windows 3.11

486DX4-75MHz **$1889**
486DX4-100MHz **$1989**

Vesa Local Bus

Vesa PCI Local Bus

MDS PENTIUM 60/66 PCI/VLB
(8MB RAM/540MB Hard Disk/256/14")

- Intel Pentium P5 Processor
- Heat Sink and cooling Fan
- Pentium PCI/VLB Motherboard w/256K Cache
- 2 VL, 5 ISA & 4 PCI Bus Slots
- 8MB RAM (72-Pins SIMM-70ns)
- Teac 1.2MB (5-1/4") & 1.44MB (3-1/2") Floppies
- 540MB SCSI Hard Drive
- NCR PCI SCSI Controller Card
- Orchid Kelvin 64 PCI Win Accelerator w/1MB DRAM
- 14" Non-Interlaced SVGA Monitor (1024x768, .28mm)
- Middle Tower Case w/250 Watt Power Supply
- 2 Serial, 1 Parallel & 1 Game Ports
- 101 Enhanced Soft/Click Keyboard
- MDS Serial Mouse w/Mouse Pad
- MS DOS 6.2 & Windows 3.11

PENTIUM 60MHz **$2199**
PENTIUM 66MHz **$2299**

MDS PENTIUM 90 PCI/VLB
(8MB RAM/540MB Hard Disk/256/14")

- Intel Pentium P5 Processor
- Heat Sink and cooling Fan
- Pentium PCI/VLB Motherboard w/256K Cache
- 2 VL, 5 ISA & 4 PCI Bus Slots
- 8MB RAM (72-Pins SIMM-70ns)
- Teac 1.2MB (5-1/4") & 1.44MB (3-1/2") Floppies
- 540MB SCSI Hard Drive
- NCR PCI SCSI Controller Card
- Number 9GXE64 Win Accelerator w/2MB
- 14" Non-Interlaced SVGA Monitor (1024x768, .28mm)
- Middle Tower Case w/250 Watt Power Supply
- 2 Serial, 1 Parallel & 1 Game Ports
- 101 Enhanced Soft/Click Keyboard
- MDS Serial Mouse w/Mouse Pad
- MS DOS 6.2 & Windows 3.11

PENTIUM 90MHZ **$2599**

LOADED MULTIMEDIA PORTABLES WITH EXCEPTIONAL VALUE!

0% FINANCING
NO PAYMENTS FOR 90 DAYS!

PORTABLE MULTIMEDIA

EVEREX STEPNOTE

STANDARD CONFIGURATION:

- **CPU:** Intel SL-Enhanced DX2-50/DX4-75MHz
- **MEMORY:** 4MB (8MB, 16MB, 20MB, 36MB Optional)
- **VIDEO:** VL-Bus Win Accelerator w/1MN VRAM
- **DISPLAY:** 9.5" Upgradable 64GS, DSTN or TFT Color
- **HARD DRIVE:** Detachable 2.5" Hard Drive
- **FLOPPY:** Detachable 1.44MB Slim Floppy
- **KEYBOARD:** Removable 86 Key Keyboard
- **TRACKBALL:** Removable 20mm Trackball
- **PCMCIA:** Two Type II & One Type III
- **AUDIO:** Sound Blaster Compatible Audio System
- **PORTS:** Serial, Parallel, PS/2 Mouse, Keyboard, EXT VGA, MIC, Line-In & Out & Docking Ports
- **BATTERY:** Primary Ni-MH Battery (Secondary Option)
- **ADAPTER:** 90V-265V AC/DC Adapter
- **CASE:** Multi-Purpose Carrying Case
- **WEIGHT:** 5.3lbs to 6.1lbs w/Battery

intel inside

	486DX2-50MHz 4MB RAM/250MB HD	486DX4-75MHz 4MB RAM/340MB HD
64GS MONO	$1845	$2315
Dual Scan Color	$2249	$2745
Active Matrix Color	$3495	$3695

PATRIOT 4000

STANDARD CONFIGURATION:

- **CPU:** Intel SL Enhanced 486SX-25/33, DX-33/66 8K burst cache built-in
- **MEMORY:** 4MB (8MB, 16MB, 20MB or 32MB optional
- **BIOS:** 1MB Flash ROM Programmable BIOS
- **VIDEO:** 32-Bit Local Bus Windows Accelerator 1MB RAM, Supports 1024x768 at 256 colors
- **DISPLAY:** 9.5" viewable LCD Panel
- **HARD DRIVE:** Ultra Fast 2.5" 170MB Hard Disk (Option: 258MB/344MB/540MB)
- **FLOPPY:** Super Slim 3.5" 1.44MB Removable FD
- **KEYBOARD:** 86 Keys with reverse T
- **TRACKBALL:** Extra large 25mm Built-In Track Ball at center
- **PCMCIA:** 2xType II Slots or 1xType III Slot
- **AUDIO:** Built-in Sound System Microsoft Sound System and Sound Blaster Compatible
- **PORTS:** 1xSer, 1 Par, 1 Ext, SVGA, 1 Keyboard 1 Docking Station Port, 1 Line-In, 1 Line-Out, 1 Mic
- **POWER:** Rechargeable Ni-Cad or Ni-MH Battery, 4-8 hours with double life tech. Auto switching AC/DC Adapter, 1.5 hours Fast Battery Charge

intel inside

	486DX-33MHz 4MB RAM/250MB HD	486DX2-66MHz 4MB RAM/250MB HD
64GS MONO	$1829	$1939
Dual Scan Color	$2285	$2365
Active Matrix Color	$3449	$3529

MDS MODEL 9200

STANDARD CONFIGURATION:

- **CPU:** Intel SL-Enhanced DX-33/DX2-50/DX4-75MHz
- **MEMORY:** 4MB (8MB, 16MB, 20MB, 36MB Optional)
- **BIOS:** Award BIOS w/ 128K Flash ROM
- **VIDEO:** VL-Bus Win Accelerator w/1MN VRAM
- **DISPLAY:** 9.5" 64GS, DSTN or TFT Color
- **HARD DRIVE:** 250MB Hard Drive (340MB, 520MB Optional)
- **FLOPPY:** Built-In 1.44MB Floppy
- **KEYBOARD:** Built-In 86 Key Keyboard
- **TRACKBALL:** Built-In 25mm Trackball
- **PCMCIA:** One Type IV Slot (Two Type II/One Type III + One Type II)
- **AUDIO:** Sound Blaster Compatible Audio System
- **PORTS:** Serial, Parallel, PS/2 Mouse, Keyboard, EXT VGA, MIC, Line-In & Out & Docking Ports
- **BATTERY:** Ni-MH Battery
- **ADAPTER:** 90V-265V AC/DC Adapter; 2 Hours Quick Charger
- **CASE:** Multi-Purpose Nylon Carrying Case
- **WEIGHT:** 6.6lbs w/Battery

intel inside

	486DX-33MHZ 4MB RAM/250MB HD	486DX2-66MHZ 4MB RAM/250MB HD	486DX4-100MHZ 4MB RAM/250MB HD
64GS MONO	$1795	$1855	$2210
Dual Scan Color	$2295	$2340	$2715
Active Matrix Color	$3275	$3320	$3695

PROFESSIONALISM

A highly trained personnel staff brings you knowledgeable and courteous assistance without wasting your valuable time.

QUALITY

True savings only come with high-grade products with competitive prices. Get the best, from the best, at MDS!

SERVICE

We service you not just before you buy, but after the sale too! We pride ourselves on keeping in close contact with the customer to ensure top-notch service for as long as you need assistance. We provide solutions at MDS.

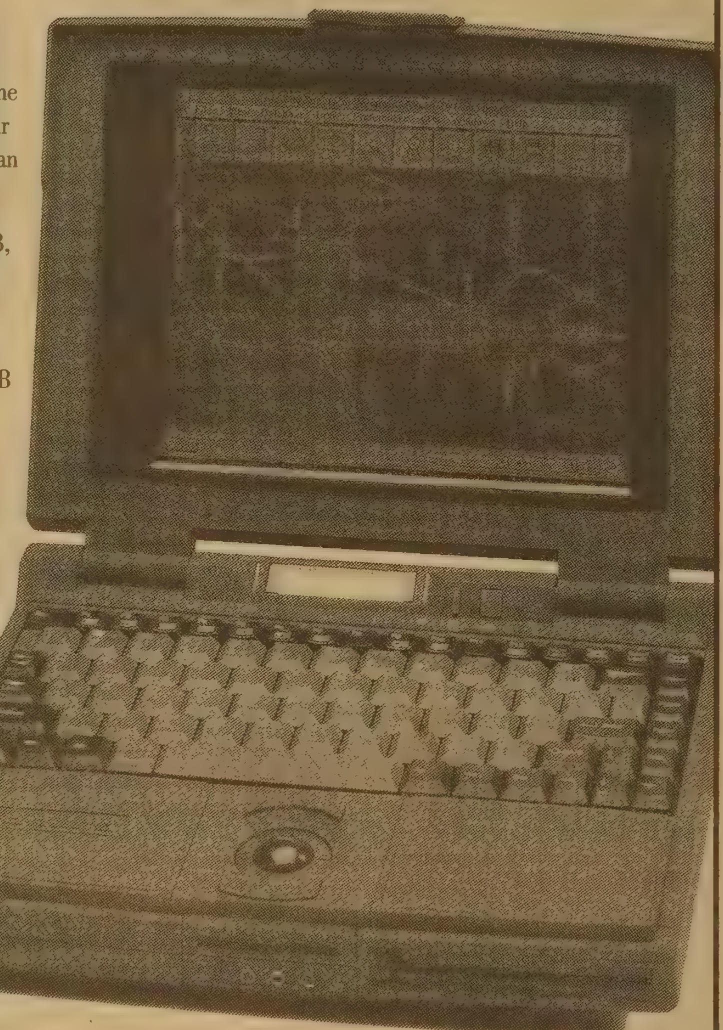
TERMS: No surcharge for VISA, Master Card and Discover. We accept government, educational and corporate purchase orders. Prices and specifications are subject to change without notice. All items are subject to availability. We are not responsible for errors in typography or photography. The Intel 486 Inside Logo and Pentium are trademarks of Intel Corporation. All other brands and product names are trademarks or registered trademarks of their respective companies.

MDS

SAN FRANCISCO
3210-3212 GEARY BLVD. • SAN FRANCISCO, CA 94118
FAX (415) 750-0649
415-750-0863
M-F 9-6, SAT 10-5

Novell Authorized Reseller

Imagine the Possibilities



The sky's the limit with Altima Systems' *new* **Virage** notebook. Made to order for you in over 300 notebook configurations, the Virage's modular design keeps up with your ever changing computer needs. Plus you can upgrade at anytime.

CPUs: SL Enhanced i486 SX/33, DX/33, DX2/50 or DX2/66

RAM: 4/8/16/20/32MB of RAM

Storage: 120, 200, 250, 340, and 524MB of Hard Disk storage.

Display: 9.5" Upgradeable LCD panels Mono, DSTN, and TFT

The **Virage** has digital audio sound on-board and is compatible with a Type III PCMCIA card. When you think of a notebook to fit your needs — think Virage. The possibilities are endless.

(800)356-9990

altima

2440 Stanwell Drive, Concord, CA 94520
Tel 510/356-5600 Fax 510/356-2408
©1994 Altima Systems, Inc.
Virage is the trademark of Altima Systems

DISK DRIVE
◆BLOWOUT!!!◆
WHOLESALE PRICES

QUANITIES ARE LIMITED ◆ Hurry while supplies last!!!

170 Meg SCSI/IDE $149/145
210 Meg IDE $179
240 Meg SCSI $215
540 Meg SCSI/IDE $319/309
1.44/1.2 Floppy (Refurbed) $58
Single Speed CD ROM Drive w/16 Bit sound Card $69
Cordless Mouse (Mac) $25

KENSEI INTERNATIONAL LTD
CALL 415-638-0112 ◆ FAX 415-638-0114

BAM ACCESS TO MARKETS • BAM MEDIA • BAM ACCESS TO MARKETS

California's Computer Magazine
MICROTIMES

EDITOR-IN-CHIEF
Dennis Erokan

PUBLISHER
Chuck Stanley

ASSOCIATE PUBLISHER
Amy Marson

EDITORIAL 510-934-3700
email: Microx@well.sf.ca.us
EDITOR Mary Eisenhart
ASSOCIATE EDITOR Michael Robin
NEWS EDITOR Paul Hoffman
ART COORDINATOR Monika Lukenbill
SENIOR DESIGNER Rick Colby
CONTRIBUTING EDITORS Lenny Bailes, John Perry Barlow, Jennifer Robin Cherniss, Kathleen Creighton, John C. Dvorak, Jonathan E., Bennett Falk, Mitsu Hadeishi, Peter John Harrison, Ed Kahn, Mitchell Kapor, Matthew Leeds, David Morgenstern, Robert Moskowitz, Douglas J. Nakakihara, Fabian Pascal, Tony Reveaux, David A. Simon, CPA, Birrell Walsh, Jim Warren, John Wolcott
CONTRIBUTING WRITERS Mikael Blaisdell, Anna Couey, Rich Grace, Fred Haslam, Fred Lieberman, Woody Liswood, Judy Malloy, Michael Nieman, Kevin Savetz
EDITORIAL ASSISTANT John Downen
CONTRIBUTING PHOTOGRAPHERS Jay Blakesberg, Michael Jay, Susana Millman, Ann Summa, Paul Winternitz

ADVERTISING 510-934-3700
SALES MANAGER (SO. CAL.) Cynthia Lapporte
SENIOR ACCOUNT DIRECTOR (NO. CAL.) Barry Green
NATIONAL ACCOUNT DIRECTOR (SO. CAL.) Jane Shepherd
ACCOUNT EXECUTIVES Marty Gillow, Tracy Longo, Ken Marson, Herb Mendelsohn, Debra Siegel, Chloe Vezo
CLASSIFIED & SUBSCRIPTION MANAGER (NO. CAL.) Jennifer Kosta
ADVERTISING SERVICES ASSISTANT
Carolyn Guerrero (Northern California)
Michelle Rosendin (Southern California)
CO-OP MANAGER Nick Alvarez

PRODUCTION
GROUP PRODUCTION MANAGER Mary Beth DeSantis
ART POOL SUPERVISOR Gary Sparks
PRODUCTION ASSISTANTS Caroline Keller, Matt Matuska
TRAFFIC ASSISTANT Beth Bartels Tarder
ASSOCIATE DESIGNERS Paul Dorian, Michelle Logan
ART STAFF Renée Alborelli, Randy Atwood, Jennifer Bagwell, Donna Bogener, Lance Borde, Linda Burkard, Peter Kowalesyn, Miranda Liss, Sherry Reynolds, Michelle Roberts, Lisa Spencer
CAMERA OPERATOR Jesse Coleman
PROOFREADERS Becky Call, John Downen, Catherine Lowe

ADMINISTRATION
HUMAN RESOURCES DIRECTOR Erica Stein-Oakley
N.C. ASSISTANT OFFICE MANAGER Christine Garcia
N.C. ADMINISTRATIVE ASSISTANT Leta Jesch
N.C. OFFICE CLERK Kerri Neely
L. A. OFFICE MANAGER Raphaella Vaisseau
L. A. ADMINISTRATIVE ASSISTANT Jacqui Tavis

ACCOUNTING/COMPUTER SERVICES
ACCOUNTING SUPERVISOR Linda May
ACCOUNTING Joaquin Arellano, Richard Cook, Vickie Liu, Brian Murray, Bonnie Peterson, Sheryl Sindt, Sara Tassione
CREDIT MANAGER Doug Morgan
NETWORK/COMPUTER SUPPORT Jason Boatman, John Dito

DISTRIBUTION 510-934-3700
DISTRIBUTION MANAGER John Erokan
ASSISTANT MANAGER/LA Art Holland
DISTRIBUTION ASSISTANT Tami Martin
DISTRIBUTION CLERK Jesse Sullivan
FIELD COORDINATORS Roe Eyth, Frank Grygus
DISTRIBUTION Dennis Anderson, John Clefstad, Don Karr, Juan Lau, Jac Michanovic, Robbie Myers, Curtis Ng, Kelly Orr, Joseph Rafalo, Reliable Circulation, John Dimas Rezendes, Bill Rivera, SPS, Wilfredo Villarroel
PUBLICATIONS *BAM, DRIVE!, SF Downtown, Home Improvement & Design*

FOUNDERS
Dennis Erokan, Don Hamilton, Pat Hamilton

This Vol. 10 No. 10 August 24, 1994, Whole No. 126. MicroTimes, California's Computer Magazine, is published by BAM Media, Inc., 3470 Buskirk Ave., Pleasant Hill, CA 94523. Phone Advertising Office (510) 934-3700. Fax (510)934-7351. email Microx@well.sf.ca.us Los Angeles Office, 6767 Forest Lawn Drive, Suite 110, Los Angeles, CA 90068. Phone (213) 851-8600. Fax (213)851-8303. San Jose Office, 36 Harold Ave., Suite 2, San Jose, CA 95117. Phone (408) 244-4400. Fax (408) 248-4552. Anaheim Office, 801 East Katella Ave., Suite #210, Anaheim, CA 92805. Phone (714) 939-2809. (714)978-6135. MicroTimes™ is © 1994 by BAM Media, Inc. Subscription rates: 14 issues, U.S.: 4th Class $35 (Allow 3 to 4 weeks for delivery), 1st Class $65 (Allow 1 to 2 weeks for delivery). MEXICO & CANADA: Surface Mail $50 (Allow 4 weeks for delivery). Air Mail $75 (Allow 1 week for delivery). OVERSEAS: Surface Mail $50 (Allow 6-10 weeks for delivery), Air Mail $178 (Allow 1 week for delivery). To receive sample issues, please send $5 ($6 for overseas) to cover postage costs. Back issues are $6 each. All rights reserved. Reproduction in whole or in part without permission of Publisher is strictly prohibited. The staff and management of MicroTimes do not advocate or encourage the use of any product or service advertised herein for illegal purposes.

40 BPA INTERNATIONAL®

HUGE SALE
HUGE CAPACITY
HUGE SAVINGS

BIG DRIVES - BIG BARGAINS

DESCSI
FSCSI
IDE
SCSI-II
SCSI

SPEED CAPACITY SAVINGS

BRAND NEW CSC EXTERNAL 2100MB FAST SCSI-II

COMPLETE
$995!

A complete 2.1GB external hard drive for less than $1,000! Our FAST SCSI-II drive comes complete in a CSC external enclosure, ready to go to work safely storing your biggest files. These dependable drives feature a snappy 12ms average access time, accompanied with a powerful 256K cache. Whether you're operating a PC or a Macintosh™, or if you need a lot of file server capacity, this has to be the drive you've been looking for, at a price you won't believe. All we can say is, **BELIEVE IT!** At only 47¢ per Megabyte, these incredible bargains are sure to sell out fast, so don't wait, call our friendly sales staff today.

15-DAY SATISFACTION GUARANTEE

15-DAY SATISFACTION GUARANTEE

It's simple. Your satisfaction is fully guaranteed. If you are dissatisfied with any product purchased from CSC, return it within 15 days in original condition. We will gladly refund the purchase price of the item, less any shipping, no questions asked. Software and media are not returnable. Free lifetime technical support is available for all of the hardware products we sell. You are also protected by Corporate System Center's fast turnaround repair/exchange warranty.

SCSI DRIVES

Q105S,	105MB, SCSI -	$99
CSC3200D,	213MB, SCSI-	$145
94171-327,	327MB, SCSI -	$169
MXT540S,	540MB, SCSI-II -	$379
1598-15,	1000MB, SCSI-II	$495
DK516C-15,	1340MB, SCSI-II	$639
ST41650N,	1415MB, SCSI-II	$649

IDE DRIVES

CSC30200,	212MB, IDE-	$159
LXT340A,	340MB, IDE-	$194
CSC250A,	251MB, IDE-	$195
CSC30344,	343MB, IDE -	$199
CSC3504,	509MB, IDE -	$249

We gladly accept Visa/Mastercard, COD or prepaid orders. No surcharge for credit cards.

CORPORATE SYSTEMS CENTER

1294 Hammerwood Ave. Sunnyvale, CA 94089
Tel.(408) 734-DISK
Fax (408) 745-1816

Prices subject to change. Quantities are limited on some items. All trademarks are property of their respective owners.

10,000 DISK DRIVES IN STOCK—CALL FOR A FREE PRICE GUIDE FOR COMPARISON SHOPPING

Fast 600 dpi performance

Mac and PC compatible!

Versatility, speed and quality at a super price!

Connect the SX-29000 to both the Macs and PCs in your office and let 'er rip! You'll get fast 8ppm, high-quality 600 dpi performance–and the dependability you've come to expect from The Printer Works!

The versatile SX-29000 is expressly designed for full compatibility with both Macs and PCs! It combines the popular Canon SX engine with the AMD 29000 32-bit RISC processor for fast formatting of complex documents. The high-performance controller card doubles the resolution of the SX engine from 300 to 600 dpi! The controller is also available separately (see below).

$1295

Includes toner cartridge

30 DAY MONEY BACK GUARANTEE

1-YEAR WARRANTY

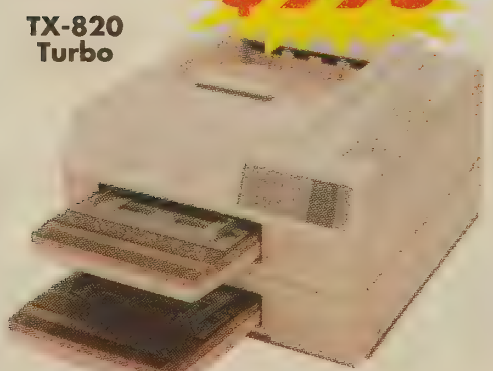
- Standard memory: 8MB
- Expandable to 16MB of RAM
- 850 x 850 dpi equivalant gray scale
- PostScript® language compatible with 35 built-in scalable fonts using PhoenixPage
- Auto Emulation Switching—senses PCL or PostScript languages automatically
- SCSI interface for hard drive based font library
- Contains both TrueType and Adobe Type 1/3 compatible rasterizers for high-speed scaling of Mac and Windows fonts
- Appletalk RS232 and Centronics parallel interfaces

TX-820 Turbo

For users requiring authentic Adobe PostScript® we offer the TX-820 turbo at an incredibly low price. Contains 39 Adobe fonts, PC and Mac compatible, 4 Mb RAM, 300 dpi, dual-bin Canon TX engine, SCSI port for hard drive of fonts.

$995

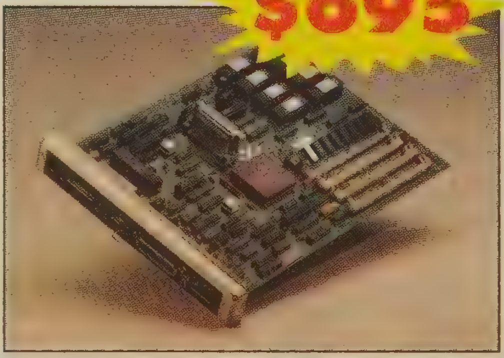
TX-820 Turbo



Controller Upgrade!

This upgrade board (featured in the SX-29000 above) makes HP Laserjet Series II/III printers and certain others Mac-compatible! Upgrading laser printers is our speciality! Call us for upgrades for many other printers. To make it more affordable, we'll even buy back your old controller!

$695



LX-29000 is Mac and PC compatible!

We made some great buys and we're passing on the savings! Our best-selling LX-29000 uses MicroSoft TrueImage and TrueType and the high-speed AMD 29000 RISC processor. Small footprint, very reliable, PC and Mac compatible—connect to both simultaneously if you like!

$595

with toner cartridge

Order Toll Free

1-800-225-6116

30 DAY MONEY BACK GUARANTEE

1-YEAR WARRANTY

the PRINTER WORKS

3481 Arden Road, Hayward, California 94545

All printers come with a limited One Year Warranty from The Printer Works, Inc. PostScript is a registered trademark of Adobe Systems, Inc. PCL is a trademark of Hewlett-Packard Co. TrueType is a registered trademark of MicroSoft Corporation. AMD-29000 is a trademark of Advanced Micro Devices, Inc. PhoenixPage is a trademark of Phoenix Technologies Inc.

News and Views

BY PAUL HOFFMAN

Industry Insight

Microsoft Agrees To Change Tactics To Avoid Prosecution

In a somewhat anticlimactic move to end the investigation by the US Department of Justice, Microsoft has signed a consent decree that limits a few of the methods it uses to control the worldwide market of PC operating systems. According to Microsoft, the agreement will have no discernible impact on its finances, and many of Microsoft's competitors were disappointed that so little was covered by the settlement.

The basic parts of the agreement say that Microsoft will:

- stop licensing MS-DOS and Windows to hardware manufacturers based on the number of systems the manufacturer ships
- shorten the required license for hardware manufacturers to one year
- change the restrictions on companies that have nondisclosure arrangements with Microsoft for future versions of operating systems

The agreement did not cover other issues which Microsoft's competitors had hoped would be investigated, such as unfair competition because Microsoft's applications departments are given advance information about future operating systems versions. However, the agreement does not prevent the Department of Justice from coming after Microsoft in the future for other anticompetitive practices.

In an interesting twist, the agreement was between three parties instead of the normal two. The third group was the European Commission, which had also been investigating Microsoft's practices. The EC became involved when Novell complained to them about Microsoft's tactics over a year ago. The agreement is immediately binding in the EC, while it still must be approved by a US federal judge before it takes effect here.

It has taken many years to get to the agreement, and the chief of the Department of Justice's antitrust division, Anne Bingaman, agrees that the settlement comes years later than it should. The main problem was that the case originally started in the Federal Trade Commission, which sat on the investigation for many years without proceeding.

Now, the decree will have almost no visible effect on PC users. Because Microsoft was able to get its operating system on essentially every PC made, almost no one even considers other operating systems. If the agreement had come five years ago, DR DOS (now NovellDOS) and OS/2 might have had a fighting chance in the consumer's mind. However, it is unlikely that more than 10% or 20% of the market will even consider those alternatives to MS-DOS or the upcoming Windows 4.

> **If the agreement had come five years ago, DR DOS (now NovellDOS) and OS/2 might have had a fighting chance in the consumer's mind.**

The basic issue tackled in the consent decree is Microsoft's requirement that a hardware manufacturer pay a royalty on every PC it makes, regardless of whether it is sold with Microsoft's operating system, in order to get a sharp discount on MS-DOS and Windows. Unless the manufacturer was willing to pay a higher royalty rate per copy of MS-DOS sold, this essentially forced them to put MS-DOS on every machine they sold, since they'd already paid for it. Microsoft's stated reason for this requirement was that many manufacturers were cheating, and it was much easier to audit the entire PC run instead of just those systems that the manufacturer said had MS-DOS installed.

Under the agreement, Microsoft will no longer offer these discounts. This could possibly raise the price of PCs for some manufacturers, but it is unlikely to do so because Microsoft will probably give the same total pricing to all the major manufacturers. The agreement also prevents Microsoft from making multiyear pricing agreements, giving hardware manufacturers more incentive to look at MS-DOS competitors. However, since so few users would even consider a non-Microsoft operating system at this point, the agreement will probably have little effect on Novell or IBM's abilities to sell copies of NovellDOS or OS/2.

The nondisclosure agreement portion of the consent decree came out of Microsoft's attempts to limit the ability of software manufacturers to work on Windows 4 and Windows NT at the same time they worked on other competing operating systems. Microsoft's reasoning for this restriction was that these developers might leak information to its competitors; this argument is fairly ridiculous, given how quickly details about Microsoft's prerelease versions are covered by the press. The consent decree says that Microsoft won't put such onerous restrictions in its nondisclosure agreements in the future.

The Department of Justice left open the possibility that it will go after Microsoft on other antitrust grounds, but it seems unlikely that this will happen in the short run. For Microsoft's competitors in the software market, this was particularly disappointing. Many companies claim that Microsoft's applications developers have an unfair advantage over other companies because they know about new features and changes in operating systems before outside companies

THE COMPUTER LOW PRICE LEADER!

486DX-33 VESA $689
486DX2-50 VESA $769
486DX2-66 VESA $799

Systems Include: Local Bus Motherboard w/CPU, 256K Cache, 4 MB RAM, 1.44 FDD, 270MB HDD, IDE W/I/O, 1MB VESA VGA Card, Mini Tower w/230W PS, 101 Keyboard

Add Only $30 For 420 MB HDD
Add Only $250 For Multimedia Kit
(Double Speed CD-ROM, 16 Bit Sound Card, CD Titles, Speakers)

SPECIALS
1 MEG (70ns)..........$35
4 MEG (70ns).........133
4 MEG (72 Pin)......145
387 Math Chip..........28
420 MB HDD.........205
MiniTower w/230W..36
MidTower w/230W...49
80 Watt Speakers 39

MOTHERBOARD w/CPU
386SX-40 . . . . $63
386DX-40/128K 87
486SLC-33 87
486DLC-33/128K 119
486DLC-40 128K 139
486SX-33 256K 169
486DX-33/256K VESA . . . 209
486DX2-50/256K VESA . 279
486DX2-66/256KVESA . 299
486MBW/O CPU(72 PIN) 92
PENTIUM 60/256K PCI . CALL

ADD-ON CARDS
IDE w/I/O. $11
IDE w/I/O VESA 19
MFM/RLL CTL 29
ADAPTEC 1542 159

MONITORS
14" Mono $73
14" SVGA (.39) 182
14" SVGA (.28) 208
14" SVGA (.28) NI. 218
15" SVGA NI 353
Other Brands . . . . CALL

MISC.
101 Keyboard $15
Keytronics Keyboard. 26
Mouse. 8
Microsoft Mouse. 22
CPU Fan. 7
1.44 FD Drive. 33
VGA (512K). 34
VGA (1MB) ISA 54
VGA (1MB) VESA. 69

HARD DRIVES
210 MB (IDE). $160
256 MB (IDE). 180
540 MB (IDE). 278
420 MB SCSI 385
540 MB (SCSI). 410
1.0 GB (SCSI). 610

MULTIMEDIA
Panasonic DS CD-ROM . $145
SONY DS CD-ROM. . . . 129
16 Bit Sound Card 72
Sound Blaster 16. 90
NEC 3X CD-ROM 335

MULTIMEDIA KIT
Sony DS CD-ROM, 16 Bit Sound Card, Stereo Speakers, Audio Cable, 6 CD Software, FREE Installation
$269

QUALITY SERVICE WITH UNBEATABLE PRICES!

BINARI STAR
INTERNATIONAL
355 W. OLIVE AVE., SUITE 101
SUNNYVALE, CA 94086

TEL: (408) 738-1558
Fax: (408) 738-8628
Prices Subject To
DROP w/o Notice

Efi's
DISCOUNT COMPUTERS

JUST A SAMPLE

3Com AST Canon SAMSUNG MITSUBISHI ELECTRONICS TOSHIBA intel ZENITH data systems NEC IOMEGA Acer

- **IBM ThinkPad 500** 50MHz, 85MB, 4MB, Mono **$859**
- Sony Dual Speed CD-ROM w/Controller **$155**
- Toshiba XM3401B SCSI CD . . **$295**
- Altec ACS 300.1 Speakers . . . **$249**
- Practical Per. 28.8 Internal Fax Modem **$245**
- 2.1GB SCSI Drive **$1295**
- 800MB IDE Drive **$459**
- TI MicroMarc Color InkJet **$395**
- GoldStar 17" .28 SVGA Monitor **$679**
- Panasonic Laser 4410 . . . . . . **$499**

LOWEST PRICES ON ALL AST & CANON PRODUCTS GUARANTEED!

altima OKIDATA IBM SCO ALR ALPS AMERICA Panasonic EPSON HEWLETT PACKARD Hayes CITIZEN NOVELL

Fax for inquiries, price bids & purchase orders: (510) 283-1744
Free delivery and installation of systems within 30 miles. Free in-store installation of any product.
CALL US FOR YOUR PRICE ON ANY PRODUCT.
HOURS: MON-FRI. 9-5, SAT. 9-1
3441 GOLDEN GATE WAY, LAFAYETTE, CA 94549
(510) 283-1700
CALL BEFORE YOU BUY
We are actively seeking minority businesses supplying computer products. Please Call!
Prices may change without notice. 90 day warranty on all products.

Industry Insights *continued...*

do. No one has proven that this gives Microsoft's applications any advantage in the market, and many of the major players in the software market have been able to keep up with Microsoft on features in their software.

This may change later this year when the first round of Windows programs that use OLE v2 appear. OLE, Microsoft's technology for Object Linking and Embedding, allows a program to create documents that include parts of documents created by other programs; for example, it makes it easy to create a word processing document that includes part of a spreadsheet. OLE v2 makes it easier for software manufacturers to include parts of documents created by software that they didn't write by making a supposedly standard set of routines.

As many developers have recently discovered, OLE 2 is anything but perfect. In a move decried by many companies, Microsoft has refused to help them ensure that their programs that use OLE 2 will work with other programs that use OLE 2. According to Microsoft's developer relations department, Microsoft will not help outside application vendors test compatibility.

If you buy two programs from different manufacturers, you cannot be sure that you will be able to transfer data between them. For example, one program may support only a few of the OLE 2 features, and the other supports different ones. Of course, you can expect all the programs from one company to transfer data correctly, and guess which company knows all about the internals of OLE 2, probably has first crack at the OLE 2 development tools, and has programs in every major application category: Microsoft.

This kind of action on Microsoft's part might still spark another investigation by the Department of Justice or its lethargic partner the Federal Trade Commission. Given that Microsoft was concerned enough about the EC's investigation to include them in the agreement process, the EC's investigatory agencies could also move ahead on fronts not covered by the consent decree. If there is enough outcry from European companies about Microsoft's tactics in other areas, they may still face court cases that could force them to change the way they do business.

A point often overlooked in the many years that the computer press covered this story is that it is not clear that the PC user community was hurt by the pricing practices that Microsoft has now sworn off of. Having a choice of brands of gasoline is probably a good way to keep prices down; forcing Ford to offer engines from different manufacturers in new cars might not be such a hot idea. Imagine if Microsoft was forced to change its practices five years ago, and DR DOS and OS/2 became viable alternatives to MS-DOS.

Would the popular applications like WordPerfect have appeared on each platform? Would the operating system add-ons like disk compression have appeared if they had to run on each platform? Look how long it took WordPerfect or Lotus to get a good program running on Windows—what would have happened if there were three competing operating systems running on PCs?

The fragmentation of the market might have been good in forcing each operating system company to keep up technically with the others. However, it could also have made it hard on users who wanted to use two applications that didn't run on the same operating system, similar to the problems still faced today by users of Macintosh and Windows programs.

BETA NINETIES COMPUTER INC. & BETA 90'S NETWORK TECHNOLOGIES INC.

Downtown SF Office Grand Opening

Think about this...

B.N.T. Beta 90's Network Technologies

Novell Certified NetWare Engineer™

We Specialize in The Following Services:

- Small, Medium, Enterprise Network Design and Installation
- Cable Plant Design and Installation • Network Trouble Shooting
- Application Software Consultation and Installation • Network Maintenance Contracts
- Customized Network Training Classes • Telephone/Remote Support
- Network Management and Administration Service • Offsite Backup Tape Storage

We make computer networks affordable and easy to use.

Take advantage of today's technology. Before you decide, get the facts from B.N.T., the leader in computer networking services.

For computer service, upgrades, set-up, networking, on-site service and more. We are just one phone call away from your office. Our mission is to provide good service and support to our customers. Please give us a call.

THE LEADER IN CUSTOMER SERVICE

WE'LL MAKE SURE YOU LEAVE FEELING SATISFIED BECAUSE YOUR SATISFACTION IS OUR BIGGEST GUARANTEE.

SALES • SUPPORT

1 YEAR PARTS

2 YEARS LABOR

WARRANTY

SERVICE

MULTIMEDIA PACKAGE

Panasonic Double Speed CD-ROM Drive

Sound Blaster 16 Sound Card

Pair of Amplified Speakers - 40W

14 CD Titles

$325

Add a 420MB IDE Hard Drive to Your Computer For Only

$250

For other computer configurations and parts, please call.

MONTHLY SPECIAL AMD 486DX-40 VLB Multimedia System

- AMD 486DX-40MHz CPU & VLB M/B w/128K Cache
- 4MB Memory
- 1.44MB (3 1/2") Floppy Drive
- 420MB IDE Hard Drive
- VLB 2H/2F IDE Controller
- 2 Serial, 1 paralled, & 1 Game Port
- 32 Bit VLB SVGA Card w 1M
- 14" SVGA Color Monitor (1024x768) .28dp
- 101 Enhanced Keyboard
- Mini Tower Case w/PS
- Panasonic Double Speed CD-ROM Drive
- Sound Blaster 16 Sound CArd

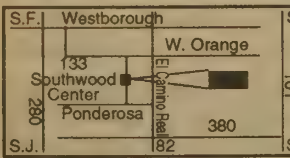
$1299

INTEL 486DX2 VESA Local Bus System 486DX2-66MHz

- Intel 486DX2-66MHz CPU
- 128K Ultra Fast External Cache
- 4MB Memory (Exp. to 32MB)
- 1.2 & 1.44MB Floppy drives
- 420 IDE Hard Drive
- 2H/2F VLB IDE Controller (2S, 1P, 1G)
- 32 Bit VLB SVGA Card w/1MB
- 14" Full Screen SVGA Non-Interlaced Monitor (1024x768) .28dp
- 101 Enhanced Keyboard
- Mini Tower Case w/PS
- Serial Mouse & Pad
- 96/24 Internal Fax Modem

$1255

BETA NINETIES COMPUTER INC. & BETA 90'S NETWORK TECHNOLOGIES INC.



South SF Office:
133 Southwood Center
So. SF, CA 94080
(415) 875-6682
Fax (415) 875-6683

Monday-Friday
9:00-6:30
Saturday 10-5
(Please call for an appointment on Saturday)

MasterCard

VISA

After business hours service available for networking.

1 Year Parts & 2 Years Labor
Warranty on Computer Systems Only

Prices subject to change w/o notice.
Not responsible for typographical errors.

Tech Support (415) 952-0388

Downtown SF Office:
74 New Montgomery St.
Suite 130
SF, CA 94105
(415) 974-1188
Fax (415) 974-1575

Cyrix Gets Official Nod From AST; 486 Market To Open Up

A few months ago, Intel's lead competitor AMD made a deal with Compaq to include AMD's CPUs in a few of its line of computers. Now another Intel competitor, Cyrix, has a deal to supply CPUs to AST Research, another major manufacturer of PCs. The two agreements with major computer vendors, and the many that are expected to be announced in the coming months, show that the 486 market is about to get much more competitive than Intel would like.

Intel has responded to Cyrix and AMD by deemphasizing the 486 market in favor of the Pentium market that it owns completely.

Although the AST-Cyrix announcement didn't say how many systems AST would include the CPUs in, it was an indication that major system vendors are uncomfortable relying on Intel for all their CPUs. This is due to many factors, including Intel's spotty record in shipping chips that it no longer considers important and Intel's inconsistent pricing policies. Cyrix and AMD will be able to pick up more bits of the CPU market as more large manufacturers turn to them on an experimental basis.

Intel has responded to Cyrix and AMD by deemphasizing the 486 market in favor of the Pentium market that it owns completely. It has also lowered its prices on 486 CPUs in an effort to squeeze Cyrix's and AMD's profits, and at the same time show that Intel doesn't think much of the value of the 486. If Intel acts as it has in the past, it will start phasing out many 486 models as the price of the Pentium drops to similar levels as 486 CPUs.

However, that strategy may not be to Intel's advantage in the long run, since the demand for high-end computers may not be as strong as it has in the past. A good indicator of this is the early reports from Windows 4 beta testers who say that it runs about as fast, if not faster, than Windows 3.1 on 486 and 486SX systems. Although it is likely that many multimedia applications will require a Pentium processor in the future, most multimedia titles that don't include full-screen video now run just fine on 486 systems.

Cyrix and AMD will probably be strongest in the notebook market, where few people even think of running multimedia and all that's really required is the ability to run Windows-based communications programs, word processors, and spreadsheets. Even slow 486SX chips seem to do just fine at these tasks under Windows 3.1, and if Microsoft is successful at making Windows 4 run on par with Windows 3.1, it is likely that the 486SX and 486 markets will survive well for at least another three years. ■

Copyright © 1994 by Paul Hoffman. All rights reserved.

CD Titles

7th Guest (2CDs)	$16.95
Arthur's Teacher Trouble	$14.95
Business Library	$14.95
Business 500	$14.95
Carmen San Diego Deluxe	$19.95
Critical Path	$19.95
DUNE	$19.95
Forever Growing Garden	$24.95
PC Library	$14.95
Return to ZORK	$14.95
KID'S ZOO/Undersea Adventure	$19.95
King's Quest V	$9.95
King's Quest VI	$16.95
Legend of the Kyrandia	$19.95
Mad Dog McCree	$19.95
Quantum Gate	$19.95
Animals, San Diego Zoo	$9.95
Dr. T's Sing-A-Long	$9.95
Fatty Bear's Birthday Surprise	$9.95
Fatty Bear's Funpack	$9.95
KODAK Photo CD	$9.95
Monkey Island	$9.95
Mayo Health Clinic	$9.95
Mario is Missing Deluxe	$9.95
Putt Putt Joins the Parade	$9.95
Putt Putt Funpack	$9.95
Secret Weapon's	$9.95
Tempra Access	$9.95
World of Education	$9.95
A Taste of Erotica	$9.95
Adult Movie Collection (Adult)	$9.95
International Beauties (Adult)	$9.95
La Traviata (Adult)	$9.95
Men's Club (Adult)	$9.95
Movies for the Night (Adult)	$9.95
Oriental HOT Nights Vol.1 (Adult)	$9.95
Oriental HOT Nights Vol.2 (Adult)	$9.95
Pink Lady (Adult)	$9.95
Pretty Babes (Adult)	$9.95
Professional Beauties (Adult)	$9.95
SAKURA (Adult)	$9.95

Multimedia 486-66 System

- MiniTower Case and Power Supply
- 486SLC2-66 VESA Motherboard
- 4MB RAM Memory
- 32 Bit IDE 2HD/2FD Controller
- 3½" Floppy Drive
- 250MB Hard Drive 12ms
- CL 32 Bit Windows Accelerator
- Double speed CD-ROM, 250ms
- Sound Blaster 16
- 2 Serial, 1 Parallel, 1 Game Port
- 14" Super VGA Monitor (0.28)
- 101 Enhanced Keyboard
- MS Compatible Mouse

CD-Titles:

- San Diego Zoo
- US Atlas
- World Atlas 4.0
- Mavis Beacon Teaches Typing 2.0
- Chessmaster 4000

On Sale for only $1188

Intel DX2-66 $1425

VESA Systems SALE

- 486DX Motherboard/CPU
- 3 VESA Local Bus Slots
- MiniTower Case/PS
- 32 Bit VLB MB with CPU
- 4MB RAM Memory
- Promise VESA IDE Ctlr
- 1.2MB and 1.44MB FD
- Conner 420MB HD
- 32 Bit SVGA Video - 1M
- 15" SVGA Monitor (0.28) NI
- Enhanced Keyboard
- MS Compatible Mouse
- 2 Serial, 1 Parallel & 1 Game
- ZIF Socket Green PC

PENTIUM P-24 OVERDRIVE READY

486DX-40/128K AMD 486DX-40Mhz CPU Inside	$1199
486DX-33/128K Intel 486DX-33Mhz CPU Inside	$1249
486DX2-50/128K Intel 486DX2-50Mhz CPU Inside	$1275
486DX2-66/128K Intel 486DX2-66Mhz CPU Inside	$1299

Super Deals

486DX-66MHz 64K

VESA Local Bus

- VESA 32 Bit VLB Motherboard w/Zif
- Pentium OverDrive Ready
- Intel 486DX2-66MHz CPU
- AMI BIOS
- 4MB RAM 70ns
- 1.44 Floppy Drive
- Conner 212MB, 13ms Hard Drive
- 32 Bit VLB Super IDE Controller
- 32 Bit Cirrus Logic VLB SVGA w/1M
- 14" SVGA Monitor 1024x768 .28dp
- 2 Serial, 1 Parallel & 1 Game Port
- 101 Enhanced Keyboard
- Mini Tower case w230W PS

All for only **$999** limit one per customer LIMITED TIME OFFER

- Prices subject to change without notice
- Prices advertised reflect Cash Discounts
- Not responsible for typographical errors
- One year parts and 5 years labor warranty
- All logos or marks are trademarks or registered trademarks of the products with which the marks are associated.

Please Call For More Information

KONICOM
COMPUTERS INC.
1510 NORIEGA STREET
SAN FRANCISCO, CA 94122
TEL: (415) 664-3268
FAX: (415) 664-0883

Business Hours
Monday - Thursday
9:30AM to 7:00PM
Friday
9:30AM to 8:00PM
Saturday
10:00AM to 6:00PM

VISA MasterCard

PC REPAIR & UPGRADES WELCOME

MONTHLY SPECIALS

12 CD TITLES on 3 CD'S	$35
SUPER 17" MONITOR 1280X1024 .26dpi NI	499
420 MB IDE HARD DRIVE	219
486 PCI/VLB WITH 256K CACHE	159
1.2 & 1.44 FLOPPY DRIVE	74
15" MONITOR .28 NI 1024X768	299
VIEWSONIC 21" NI .26 1600X1280	1499
FAST 32 BIT VLB 1MB SVGA + 2HD/2FD/2S/1P/1G	$89
1MB 1 X 3 SIMM 70ns	35
MINI TOWER CASE W/230W POWER SUPPLY	37
486DX-33/50/66 W/256K 3 VLB 0/CPU MB	81
386DX-40 + CPU/128K CACHE MB	85
14,400 FAX & MODEM INTERNAL	65
386SX-40 + CPU MB	59

486-66 MULTIMEDIA BUNDLE

Package Includes:

- 4 MB RAM-70ns
- CD-ROM Double Speed
- 280MB Hard Drive
- 16-Bit Sound Card
- 1.2 & 1.44 MB Floppy Drive
- Mini-Tower Case/230W power
- 14" SVGA 1024x768 .28 Color Monitor Non-Interlaced
- IBM 486SLC-66 MHz-64K VLB
- SVGA Card w/1 MB
- IDE Controller (2S/1P/1G) VLB
- 101 Keyboard
- Microphone/Software Bundle
- Pair of Speakers

$1299

MULTIMEDIA SYSTEMS

486SX-33 MHz/Intel CPU	$1182
486DX-33 MHz/128K/Intel CPU	1330
486DX2-50 MHz/256K/Intel CPU	1370
486DX-50 MHz/256K/Intel CPU	1400
486DX2-66 MHz/256K/Intel CPU	1400
PENTIUM 66 & 8 MB/512K/Intel CPU	2240

SYSTEM	MB+CPU	Barebone +0MB	Barebone +4MB	Bare 4+ 280MB HD	Bare 4+ SVGA Card
PENTIUM 66 PCI 256K	$1047	$1152	$1306	$1495	$1724
PENTIUM 66 VLB 512K	966	1071	1225	1414	1643
PENTIUM 60 PCI 256K	897	1002	1156	1345	1574
486DX4-100 MHz 256K	782	887	1041	1230	1459
BLUE/LIGHTNING 75MHz	334	439	593	782	1011
486DX2-66 PCI 256K	408	514	668	857	1085
486DX2-66 VLB 256K	334	439	593	782	1011
486SLC-66 VLB 64K	231	336	490	679	908
486DX-40 PCI 256K	334	439	593	782	1011
486DX-40 VLB 256K	259	364	518	707	936
486DX2-50 VLB 256K	305	410	564	753	982
486SLC-50 VLB 64K	210	315	469	658	887
486SLC-50 ISA	160	265	419	608	837
486DX2-50 PCI 256K	379	485	639	828	1057
486DLC-40 ISA 128K	137	242	396	585	814
486DX-33 PCI 256K	319	424	578	767	996
486DX-33 VLB 256K	247	353	507	696	924
486SX-33 VLB 256K	178	284	438	627	855
486-33 ISA	144	250	404	593	821

UPGRADES:

420 MB Hard Drive	Add $15
540 MB Hard Drive	Add $110
15" Non-Interlace Monitor	Add $65
17" Non-Interlace Monitor	Add $300

CASE WITH POWER SUPPLY

Mini Tower Case w/230W Power Supply	$37
Desktop AT Case w/230W Power Supply	42
Medium Tower Case w/250W Power Supply	68
230W Power Supply	38
Full Tower Case/250W/2 Fans	90
Green Power Full Tower w/250W UL	115
Green Power Mid Tower w/250W UL	75
Green Power Mini Tower w/200W UL	65

CD-ROM/MULTIMEDIA

Sony CD-ROM Double Speed/Card	$132
Mitsumi CD-ROM Double Speed/Card	142
Mitsumi CD-ROM	99
Toshiba CD-ROM 200ms SCSI	350
80W Big Speakers Pair	60
TV Recording Video Card	165
Sound Card Gallant SC6000/Speaker/MIDI	115
Sound Card Gallant SC5000/Speaker/MIDI	90
Sound Card Gallant SC3000/Speaker/MIDI	65
Sound Blaster Pro 16 Bit MCD	125
CDTC-049 G Games Expert for Window.	12
CDTC-054 G 50 Win Games (1)	9
CDTC-059 G 50 Win Games (2)	9
CDTC-060 G 50 Win Games (3)	9
CDTC-006 X Mens Club-X	9
CDTC-007 X Pretty Baby-X.	9
CDTC-008 X Pink Lady-X.	9
CDTC-009 X La Travita-X.	9
CDTC-103 X Sakura-X	9

CONTROLLERS

IDE 2FD/2HD/2S 1P 1G	$11
IDE 2FD/2HD/2S 1P 1G Local Bus	20
IDE 4FDD/2HDD 2.88	59
IDE Cache Controller/VLB	145
DTC 3280 SCSI Kit	98
Adaptec 1542CF (SCSI)	169
Adaptec 1522 (SCSI)	85

FLOPPY DRIVES

1.2 MB/1.44 MB Teac	$44/41
1.2 MB/1.44 MB Mitsumi	43/36
1.2 MB/1.44 Teac Black	50/44
1.2/1.44 MB Epson	42/40
1.2 MB/1.44 Teac Dual	110
2.88 MD FDD	98

HARD DRIVES

170 MB IDE	$170
210 MB IDE	177
240 MB IDE	205
345 MB IDE	212
420 MB IDE	219
540 MB IDE	315
540 MB SCSI	345
1.0 GB IDE	636
1.2 GB SCSI-2	850
2.0 GB SCSI-2	1360

KEYBOARDS

Mitsumi 101 Keyboard	$13
Keytronic 101 Keyboard	28
Fujitsu 4700 101 Keyboard	40
Maxi-Switch 101 Keyboard	23
Left 101 Keyboard/Click	40
Full CS 2001	33
101 Russian Keyboard	25

MODEMS

Voice 14400/14400 Fax/Modem	$115
Fax Modem (9600/2400) R/S	38
14400/14400 Fax Modem Ext	108
14400/14400 Fax Modem Int V.42	65
US Robotics Sportster 14.4/14.4 Fax/Modem	129
Intel Fax/Modem 14.4/14.4 Fax/Ex	129

MONITORS

14" VGA Mono/Mono Monitor	$92/75
14" SVGA .28 (1024x768)	220
14" SVGA .39 (1024x768)	185
14" SVGA .28 (1024x768) Impression NI	235
ViewSonic 4E/V6E 0.28	259/275
ViewSonic 15E NI .28	385
15" SVGA .28 Non-Int. 1280x1024 MGC	325
17" ADI 28 NI 1280x1024	670
NEC 5FGE/4FGE	1059/735
Nanao 550i	855
17" CTX Non-interlaced 1280x1024	625
ViewSonic 21 1600x1280	1499
Sony 1430 SVGA .25	508

MOTHERBOARDS

Pentium 586-66 MHz/512K VLB	$295
486DX-66/50/33/256K EISA & VESA	199
486DX-66/50/33/256K 2 VLB Opti	95
3 486DX66/50/33/256K 2 VLB Opti	115
486DX-66/50/33/128K 3 VLB	85
486SX-33 MHz/128K 2 VLB	80
486SX-25 MHz/128K/2 VLB	80
386SX-33/40/CPU	59
386DX-40/128K/Opti Chip	79
586/66/256K PCI/SCSI Card	395
486DX4/256K	130

MOUSE/MISC.

3 Button Mouse	$8
Microsoft Mouse/Logitech MouseMan OEM	29
Trackball Mouse	30
250 MB Tape Back-Up/Tape	150
120 MB Tape Back-Up DJ-10/EXJB-10	125/289
1 MB 70 ns SIMMS	39
4 MB 70 ns SIMMS	149
256x9 70/80 ns SIMMS	12
486 and 386 CPU	CALL
387-40 Math Co-Processor	39

NETWORK

SIIG Ethernet 3 Int Combo	$45
16 Bit Ethernet Card (10BaseT/Coax)	39
16 Bit Ethernet Card BNC/AUI/RJ45	45
Boot ROM 8-16 Bit Auto	11
Ether Express 16 Coax/TP	125/125
3C509 Etherlink III YTP/Coax/Combo	129/129/149
Hub 8 Port 10BaseT Concentrator	155

PRINTERS

Panasonic KX-2023	$199
HP DeskJet 1200C	1499
HP 4/4M/4L	1399/1895/665
HP Scanner 2C	1285
HP DeskJet 550C	495
HP DeskJet 500	289

VIDEO CARDS

ATI Graphics Ultra 2 MB VESA	$280
ATI Graphics Ultra 1 MB (VLB) ISA	155
ATI Graphics Ultra Pro 2 MB PCI	265
Cirrus Logic CL-GD5426/5428 VLB w/1 MB	83
Diamond SpeedStar Pro (ISA/VLB) 1 MB	105
Diamond Stealth Pro VLB 1 MB/ 2 MB	220/295
Genoa 8500VLB w/1 MB	95
Orchid Fahrenheit VLB w/1 MB	146
Orchid Celsius VLB 1MB/2MB	155/195
PCI 2 MB to 4 MB	179
VGA 256K/SVGA 512K 16 Bit	26/38
SVGA 1 MB 1024•768 16 Bit	55
Window Accelerators w/1 MB	55
Super Fast ASI 2000 2 MB VLB	195
Trident VLB w/1 MB	76
Matrox MGA2 + PCI 2MB TO 4MB	529

SUNNYVALE
855 KIFER RD. #B
SUNNYVALE, CA 94086
(408) 736-8590

DUBLIN
6997 DUBLIN BLVD
DUBLIN, CA 94568
(510) 803-8820

FAX: (408) 736-4151
OPEN MON-SAT: 9am-7pm SUN: By Appt
1 Years Parts & 2 Years Labor Warranty on Systems.

Prices and Company Policy Subject To Change W/O Notice. Not Responsible for Typographic Errors. Lowest Price Offer Subject To Cash Price and Stock Availability.

KINGSTAR COMPUTERS, INC.

EVER-VOLATILE HIGH-TECH STOCKS SPRANG FORWARD IN JULY

EXCH	COMPANY		TICKER SYMBOL	CLOSING PRICE 06/24/94	CLOSING PRICE 07/22/94	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD	P/E RATIO	ANNUAL DIVIDEND RATE	ANNUAL DIVIDEND YIELD	ANNUAL HIGH	ANNUAL LOW
	SOFTWARE											
OTC	Adobe		ADBE	25.50	31.19	5.69	22.30	25	0.20	0.64	34.50	16.25
OTC	Aldus		ALDC	25.06	30.38	5.31	21.20	37	0.00	0.00	34.50	15.00
OTC	Autodesk		ACAD	48.63	52.00	3.38	6.94	21	0.48	0.92	61.75	37.00
OTC	Borland		BORL	8.75	10.50	1.75	20.00	-	0.00	0.00	20.75	8.50
OTC	Informix		IFMX	14.50	20.13	5.63	38.79	23	0.00	0.00	24.50	14.25
OTC	Lotus		LOTS	34.25	31.25	-3.00	-8.76	18	0.00	0.00	86.50	30.25
OTC	Microsoft		MSFT	49.50	50.56	1.06	2.15	27	0.00	0.00	54.63	35.19
OTC	Novell	(L)	NOVL	14.50	16.13	1.63	11.21	-	0.00	0.00	26.63	14.00
OTC	Oracle	(H)	ORCL	36.63	36.75	0.13	0.34	38	0.00	0.00	40.13	22.88
OTC	Software Publishing	(L)	SPCO	4.13	3.88	-0.25	-6.06	-	0.00	0.00	8.63	3.00
OTC	Symantec		SYMC	10.50	12.25	1.75	16.67	53	0.00	0.00	20.50	9.88
	HARDWARE											
OTC	Apple		AAPL	25.61	31.00	5.39	21.05	-	0.48	1.55	45.25	22.00
OTC	AST Research		ASTA	12.88	14.50	1.63	12.62	-	0.00	0.00	33.00	12.50
NYS	Compaq (s)		CPQ	31.00	30.75	-0.25	-0.81	14	0.00	0.00	39.88	15.28
NYS	Digital Equipment		DEC	19.88	19.38	-0.50	-2.52	-	0.00	0.00	43.13	18.25
OTC	Dell		DELL	24.13	26.00	1.88	7.77	-	0.00	0.00	30.75	15.13
NYS	Hewlett-Packard		HWP	76.00	75.25	-0.75	-0.99	14	1.20	1.59	93.63	64.38
NYS	IBM		IBM	59.88	61.38	1.50	2.51	27	1.00	1.63	65.00	40.63
NYS	Silicon Graphics		SGI	21.75	21.50	-0.25	-1.15	23	0.00	0.00	26.88	16.00
OTC	Sun Microsystems	(L)	SUNW	18.38	22.13	3.75	20.41	11	0.00	0.00	31.38	18.25
NYS	Xerox		XRX	97.75	101.00	3.25	3.32	-	3.00	2.97	104.88	69.88
NYS	Tandy		TAN	33.75	36.50	2.75	8.15	15	0.60	1.64	50.75	28.13
	CPU'S											
NYS	Advanced Micro Devices		AMD	24.38	25.88	1.50	6.15	9	0.00	0.00	32.75	16.75
OTC	Intel		INTC	58.38	57.88	-0.50	-0.86	10	0.24	0.41	74.50	51.50
NYS	LSI Logic	(H)	LSI	23.13	27.00	3.88	16.76	19	0.00	0.00	29.50	13.00
NYS	Motorola		MOT	44.88	49.50	4.63	10.31	23	0.28	0.57	54.88	42.13
	COMMUNICATIONS											
NYS	AT&T		T	53.75	54.25	0.50	0.93	17	1.32	2.43	64.88	49.50
NYS	BellSouth Corp.		BLS	60.13	60.38	0.25	0.42	23	2.76	4.57	63.88	53.00
OTC	MCI		MCIC	22.31	23.81	1.50	6.72	20	0.05	0.21	29.63	21.38
NYS	Northern Telecom		NT	28.00	30.75	2.75	9.82	-	0.36	1.17	33.75	21.38
NYS	Pacific Telesis		PAC	30.63	31.25	0.63	2.04	28	2.18	6.98	34.50	27.88

KEY: NYS = NEW YORK ASE = AMERICAN OTC = OVER THE COUNTER
(H) = NEW HIGH REACHED IN PERIOD (L) = NEW LOW REACHED IN PERIOD

MARKET DIARY:

ADVANCES....................	24
DECLINES.....................	7
UNCHANGED................	0
NEW HIGHS...................	2
NEW LOWS...................	3

MOST ACTIVE ISSUES:

LARGEST DOLLAR GAINER..................	Adobe................................ $	5.69
LARGEST DOLLAR LOSER.....................	Lotus.................................. $	-3.00
LARGEST PERCENTAGE GAINER...........	Informix	38.79 %
LARGEST PERCENTAGE LOSER............	Lotus..................................	-8.76 %

	CLOSE 06/24/94	CLOSE 07/22/94	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD
MICROTIMES STOCK INDEX	4238.94	4577.29	338.35	7.98
DOW JONES INDUSTRIAL AVERAGE	3636.94	3735.04	98.10	2.70
STANDARD & POOR'S 500 INDEX	442.80	453.11	10.31	2.33
N.Y.S.E. COMPOSITE	244.55	250.24	5.69	2.33
NASDAQ COMPOSITE	693.79	716.68	22.89	3.30

CLOSING QUOTES FOR GRAPH:

DATE	MICRO TIMES	DOW JONES
01/07/94	4866.50	3820.77
02/04/94	4728.74	3871.42
03/04/94	5081.75	3832.30
04/05/94	4878.26	3675.41
04/29/94	4639.86	3668.31
05/27/94	4709.29	3757.14
06/24/94	4238.94	3636.94
07/22/94	4577.29	3735.04

Copyright Nordby International, Inc. Louisville, CO

This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy, no guarantees can be made. Nordby International and Microtimes assume no liability for any inaccuracies. For information on Nordby International's Data-On-Demand Services for any of the above companies call Nordby International at (800) 926-7404.

One month after being beaten black and blue by Wall Street, investors embraced high-tech stocks during the monthly trading session ended July 22.

The MicroTimes Stock Index, which plunged 9.99% in June when investors feared a seasonal summer slowdown would take its toll on computer companies' profits in the next two quarters, was the beneficiary of Wall Street's mercurial ways. The box score for our index of thirty-one companies tracked in the accompanying table: up a resounding 338.35 points, or 7.98%, en route to a close of 4577.29. The Dow Jones Industrial Average, not surprisingly, paled in comparison to the MicroTimes Stock Index, as that indicator of thirty blue-chip stocks added 2.7% to its market value en route to a close of 3735.04.

Turning to stocks in the MicroTimes Stock Index last month:

➻ Adobe closed the month as the largest dollar-gainer of the lot, as it rallied $5.69 a share to $31.19. Last month, the company reduced the price it will pay to acquire Aldus by 13%, or roughly $70 million, after agreeing to settle a lawsuit with Altsys, and because of falling valuations on technology companies since last March. Aldus shareholders were pleased with the news as well, as their stock price swelled $5.31, or 21.2%, before coming to rest at $30.38.

➻ Informix led the portfolio on a percentage-gained basis, rising a sturdy 38.8% to $20.13. The Menlo Park-based company pleased Wall Street when it recorded a 10% gain in second-quarter profit to $13.3 million. Following the bullish earnings report card, Bear Stearns raised its rating on Informix to "strong buy" from "buy."

➻ Apple rebounded strongly last month, rising $5.39, or 21.1%, to finish at $31. The company surprised the investment community when its fiscal third-quarter earnings leaped to 50 cents a share from 9 cents in the year-ago period, on a 15% gain in revenues. Higher gross margins and lower expenses combined to push Apple's bottom line sharply higher than what Wall Street was expecting.

➻ IBM surprised Wall Street and shareholders last month when it posted stronger-than-expected second-quarter earnings that read as follows: net income swelled to $689 million vs. last year's loss of $8 billion. Sales for the same period rose a more modest 2.7% to $15.4 billion from an adjusted $15 billion. Wall Street's reaction to the news was direct and swift: IBM's share price jumped $1.50 a share to $61.38. ■

COMPUTERLAND OF SERRAMONTE WAREHOUSE OUTLET

We Match Or Beat Most Prices!

Bring In This Ad For These Prices

APPLE® POWERBOOK®

APPLE'S NEWEST POWERBOOK

POWERBOOK 150, 4/120/SOFTWARE	**$1389**
POWERBOOK 165, 4/80	$1379
POWERBOOK 165, 4/160	$1479
POWERBOOK 520, 4/160	CALL
POWERBOOK 520C, 4/160	IN STOCK
POWERBOOK 540, 4/240	CALL
POWERBOOK 540, 12/240, W/MODEM	CALL
POWERBOOK 540C, 4/320	IN STOCK
POWERBOOK 540C, 12/320, W/MODEM	CALL
POWERBOOK DUO 280, 4/240	$2439
POWERBOOK DUO 280, 12/240, W/MODEM	$2919
POWERBOOK DUO 280C, 4/320	$3406
POWERBOOK DUO 280C, 12/320, W/MODM	$3895

APPLE POWER MACINTOSH™

POWER MACINTOSH 6100/60, 8/160	CALL
POWER MACINTOSH 6100/60, 8/250/CD	$2099
POWER MACINTOSH 6100/60AV 8/250/CD	$2379
POWER MACINTOSH 6100/66 16/250/SOFTWINDOWS™	$2182
POWER MACINTOSH 7100/66, 8/250	$2655
POWER MACINTOSH 7100/66, 8/250/CD	$2911
POWER MACINTOSH 7100/66AV,8/500/CD	$3653
POWER MACINTOSH 7100/66 16/250/SOFTWINDOWS™	$2928
POWER MACINTOSH 8100/80, 8/250	$3816
POWER MACINTOSH 8100/80, 8/250/CD	$4059
POWER MACINTOSH 8100/80AV,16/500/CD	$5083

APPLE MACINTOSH QUADRA®

APPLE'S NEWEST QUADRA

QUADRA 630, 4/250	**$1219**
QUADRA 605, 4/160, WITH SOFTWARE	$969
QUADRA 605 8/250, WITH SOFTWARE	$1259

COMPAQ

LTE ELITE 4/40CX, MODEL 170	CALL
LTE ELITE 4/75CX, MODEL 340	CALL
LTE ELITE 4/75CX, MODEL 510	CALL
CONTURA AERO 4/25,MODEL 84	$995
CONTURA AERO 4/25,MODEL 170	$1415
CONTURA AERO 4/33C,MODEL 170	$1980
DESKPRO XE 4100, MODEL 525/W	$2736
DESKPRO XE 560, MODEL 525/W	$2925
DESKPRO XL 466, MODEL 270/W	$2641
DESKPRO XL 466, MODEL 270/CDS	$2831
DESKPRO XL 466, MODEL 535/W	$3208
DESKPRO XL 560, MODEL 535/W	$3538
DESKPRO XL 566, MODEL 535/CDS	$4198

HEWLETT PACKARD

PRINTERS

DESKWRITER 520	$279
DESKJET 520	$279
DESKWRITER C COLOR FOR MAC	$384
DESKJET 500C COLOR FOR PC	$384
DESKWRITER 560C COLOR	$559
DESKJET 560C COLOR	$559
LASERJET 4L	$654
LASERJET 4ML POSTSCRIPT	LOW PRICE
LASERJET 4P	$949
LASERJET 4MP	$1349
LASERJET 4 PLUS	LOW PRICE
LASERJET 4M PLUS	LOW PRICE
DESKJET 1200C	$1442
DESKJET 1200C/PS POSTSCRIPT	$2155

SCANNERS

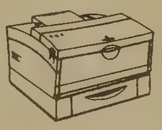
SCANJET IIP FOR PC	$482
SCANJET IIP FOR MAC	$482
SCANJET IICX COLOR FOR MAC	$925
SCANJET IICX COLOR FOR ISA	$925

TOSHIBA

T3400 PORTEGE, 4/120, MONOCHRME	$1181
T3400CT PORTEGE, 4/120, COLOR	$2380
T3400CT PORTEGE, 4/250, COLOR	LOW PRICE
TOSHIBA T1900C, 4/120	$1499
T1910. MONOCHROME, 4MB/200MB HD	$1499
T1910CS/COLOR/4MB/200MB HD	$2049
T1950CS/COLOR/4MB/200MB HD	$2159
T1950CT/COLOR/4MB/200MB HD	$2891
T1950CT/COLOR/4MB/320MB HD	$3142

NEC

NEC 3V MONITOR	$469
NEC 3FGE MONITOR	$569
NEC 4FGE MONITOR	$629
NEC 5FGE MONITOR	$995
NEC 5FGP MONITOR	$1119
NEC 6FGP MONITOR	$2026



CLEARANCE ITEMS

DICONIX 150 PLUS PRINTER	$99
EPSON EPL 8000 LASERPRINTER, 10PPM	$499
RASTEROPS SWEET 16 MONITOR	$799
SUPERMAC SUPERMATCH 21" MONITOR	$1695
E-MACHINES T19II MONITOR	$1495

COMPUTERLAND OF SERRAMONTE WAREHOUSE OUTLET

OPEN Mon.–Fri. 9a.m.–6p.m.
Saturday 10a.m.–5p.m.

409 So. Spruce Avenue
South San Francisco, CA 94080

Call Now! While Available!

(415)•615•9020

- *Not responsible for typographical errors*
- *Prices subject to change without notice*
- *Previous ad prices void*
- *Prices subject to stock on hand*

Fax: (415)•615•0844

Apple, the Apple logo, Quadra, PowerBook, LaserWriter, StyleWriter, LocalTalk, and Macintosh are registered trademarks of Apple Computer Inc. AppleCD and Macintosh Centris are trademarks of Apple Computer Inc..

HITRON SYSTEMS

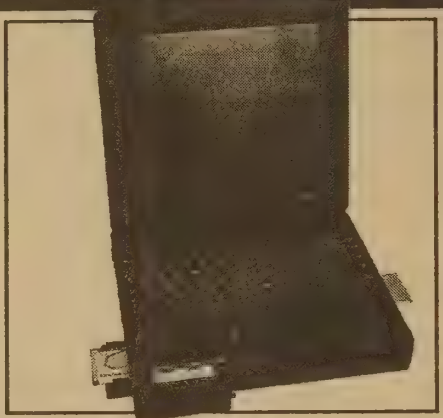
STOP

SEARCHING AROUND! COME TO HITRON SYSTEMS...WE ARE HAVING A HOT SUMMER SALE!

HOT, SMART, POWERFUL NOTEBOOK FOR HITRON

PENTIUM POWER NOTEBOOK

2 DAY SERVICE GUARANTEED!



STANDARD FEATURES:

- 8 MB RAM (Expandable to 16/24/40MB)
- Removable Hard Drive
- 1.44 Floppy Drive
- 32 Bit VLB w/1MB Display
- LCD/External & Simultaneous Display
- 9.5" Screen Size
- 1024x768 SVGA Output To External Monitor
- PCMCIA-1 Type II & 1 Type III Slot
- Parallel/1 Serial Port
- Built-In Track Ball Mouse
- Built-In Microphone and Speaker
- Docking Station Option
- 8.15 Lbs

DISPLAY	CPU TYPE	250MB	340MB	540MB
DUAL SCAN	PENTIUM 60	$2959	$3059	$3199
DUAL SCAN	PENTIUM 66	$3159	$3259	$3399
ACTIVE MATRIX	PENTIUM 60	$3999	$4099	$4259
ACTIVE MATRIX	PENTIUM 66	$4199	$4299	$4459

ACCESSORIES:

8MB RAM	$395
16 MB RAM	835
32 MB RAM	1595
PCMCIA Fax 96/48/24	139
PCMCIA Fax 14.4/14.4	199
PCMCIA Ethernet Card Coax/UTP	205
Ni-Metal Battery	140
External Numeric Keypad	65
On-Site Service 1 Year	35

486 VESA LOCAL BUS MULTIMEDIA NOTEBOOK

STANDARD FEATURES:

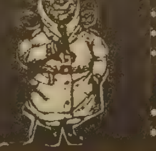
- 4 MB RAM (Exp 8/12/20/36 MB)
- 170 MB Removable Drives
- 1.44 MB FDD
- 32 Bit VLB w/1MB Display
- LCD External Simultaneous Display
- 1024x768 SVGA Output To External Monitor
- 2 Type II or 1 Type III PCMCIA Slot
- 1 Parallel/1 Serial Port
- Built-In Trackball Mouse
- Built-In Speaker & Microphone
- Docking Station Option
- 6.2 Lbs

CPU TYPE	MONO	DUAL SCAN	ACTIVE MATRIX
486DX-25	$1399	$1899	$2959
486DX-33	1599	2099	3149
486DX2-66	1619	2129	3199

ACCESSORIES & UPGRADES:

Upgrade To 250MB	Add $75
Upgrade To 340MB	Add $160
Upgrade To 540 MB	Add $330
4 MB RAM	Add $210
16 MB RAM	Add $835
NICAD Battery	$100
N-METAL Battery	$135
PCMCIA Fax Modem 96/48/24	139
PCMCIA Fax Modem 14.4/14.4	199
PCMCIA Ethernet Card Coax/UTP	205
On Site Service 1 Year	35

NETWORKING SERVICES



FROM HITRON
- LANTASTIC
- NOVELL
- CNE ON STAFF
- HARDWARE & SOFTWARE INSTALLATION
- DESIGN
- FREE CONSULTATION

BRAND NAME SYSTEMS FEATURING HIGH & QUALITY MOTHERBOARDS FROM

AMI MICRONICS NICE

CALL FOR PRICES & SPECS

90 DAYS SAME AS CASH

- 1 YEAR PARTS WARRANTY
- LIFETIME LABOR & TECH SUPPORT
- NATIONWIDE ON-SITE SERVICE AVAILABLE
- CORPORATE PO'S WELCOME
- CORPORATE LEASING AVAILABLE

Sound Like A Dream? HITRON Will Make It Happen For You!
When We Say We Can Save You Money...We Mean It!
When We Say High Quality, Low Price Is Our Goal...We Do It!
Don't Believe It? Just Pick Up The Phone And Give Us A Call.
We Will Match Or Beat Any Of The Advertised Prices!

AFFORDABLE 486 PCI *Systems*

486DX2-66 MHz Intel	**$1229**
486DX2-66 MHz AMD	**$1199**
486DX-33 MHz Intel	**$1189**
486DX-40 MHz AMD	**$1149**
486SX-25 MHz Intel	**$1049**

- Intel DX-486 Processor
- 256K Cache Expandable to 512K
- 4 MB RAM Expandable to 128 MB
- 1.44 MB Floppy Drives
- 420 MB IDE Hard Drive (NEC)
- PCI IDE Controller Card
- I/O with 2 Serial, 1 Parallel, 1 Game
- Orchid Kelvin PCI w/1 MB RAM
- 14" SVGA .28dp Monitor
- 101 Enhanced Keyboard
- Mid Tower Case w/230W PS

HITRON VESA LOCAL BUS *Systems*

486DX2-66 MHz Intel	**$1019**
486DX2-66 MHz AMD	**$989**
486DX-33 MHz Intel	**$979**
486DX-40 MHz AMD	**$929**
486SX-25 MHz Intel	**$829**

- 256K Cache
- 4 MB RAM Expandable to 32 MB
- 1.44 MB Floppy Drives
- 210 MB IDE Hard Drive
- Vesa Local Bus 32 Bit IDE Cont 2H/2F I/O with 2 Serial, 1 Parallel, 1 Game
- VESA Local Bus SVGA Card w/1 MB RAM
- 14" SVGA .28dp Monitor
- 101 Enhanced Keyboard
- Mini Tower Case w/230W PS
- 3 Button Mouse

Blowout SPECIALS

- **AMI Super Voyager 486 w/ 256K......$320**
- **NICE Super EISA 486 w/ 256K......$265**
- **486-66 Notebook Active Color.......$CALL**

386DX-40 MHz
$710

- 128K Cache Expandable to 256K
- 4 MB RAM Exp. to 32 MB
- 1.44 MB FDD
- 170 MB IDE Hard Drive
- SVGA Display Card w/512K RAM
- 14" SVGA Color Monitor w/.39dp (1024x768)
- Mini-Tower Case W/200 PS
- 2 FDD/2 HDD IDE Controller Card
- I/O 2 Serial/1 Parallel/1 Game
- 101 Enhanced Keyboard

HOT!!! *Pentium + PCI Systems*

PENTIUM PCI 66	**$1739**
PENTIUM PCI 90	**$1899**

- Intel Pentium Processor
- 256K Cache Expandable to 512K
- 4 MB RAM Expandable to 128 MB
- 16KB Internal Pentium Cache
- 1.44 MB Floppy Drives
- 420 MB IDE Hard Drive
- PCI IDE Controller w/UART 16550 Card
- I/O with 2 Serial, 1 Parallel, 1 Game
- PCI Orchid Kelvin w/1 MB Video Card
- 14" SVGA .28dp NT Color Monitor
- 101 Enhanced Keyboard
- Mid Tower Case w/250 W PS

•CUSTOM CONFIGURATION WELCOME •CUSTOM CONFIGURATION WELCOME•

DISPLAY CARDS

Trident ISA w/512K/1MB	$32/55
VLB Display w/1MB w/IDE +I/O	79
Cirrus Logio VLB w/1MB/2MB	89/148
Diamond Stealth 64 Bit w/2MB VLB/PCI	283
Diamond Viper w/2MB VLB/PCI	279/250
Orchid Kelvin 64 Bit VLB w/1 MB	137
Orchid Kelvin 64 Bit VLB w/2 MB/PCI	169
ATI Ultra Turbo 64 Bit w/2 MB PCI	279
ATI Ultra Turbo 64 Bit w/4 MB PCI	489

MONITORS

14" Impression .39/.28	$180/205
14" Impression .28 Non-Interlaced	215
15" ADI 4GP	355
17" ADI 5EP	650
17" ViewSonic 17G	765
15" MAG 15DX/17" MAG 17DX	379/655

MOTHERBOARDS

486SX/DX-25/33/50/66	$85
486SX/DX-25/33/50/66 PCI	195
Pentium Motherboard	330

Call For More
FOR CPU'S PLEASE CALL

HARD DRIVES

210 MB IDE	$163
250 MB IDE	189
340 MB IDE	195
420 MB IDE	205
540 MB IDE	279
540 MB SCSI	305
1.0 GB SCSI	629

MODEM/TAPE BACK-UP

24/96 Baud Fax	$39
14.4/14.4 Fax Int	79
14.4/14.4 Fax Ext	105
250 MB Tape Back-Up	145

CD-ROMS

Panasonic CD ROM w/Card	$145
Toshiba SCSI CD ROM	289
NEC SCSI CD ROM 3Xi Int	328
Plextor SCSI CD ROM 4Xi	499

FLOPPY DRIVES

1.44 MB (3.5") FDD	$37
1.2 MB (5.25") FDD	42

MOUSE

3 Button Serial	$8
Microsoft Serial	24
Logitech Serial	28

ADD-ON BOARDS

16 Bit IDE Card w/IO	$15
32 Bit IDE Card w/IO	24
16 Bit Fast IO	32
MGP Card	15
PCI Card	33
Adaptec	
16 Bit 1542C SCSI w/o Kit	170
32 Bit 2742 SCSI EISA w/o Kit	272
32 Bit 2842 SCSI VLB	229
32 Bit 2942 SCSI Card	279
Bus logic VLB SCSI Card	195

CASES

Baby Desktop w/200W PS	$36
AT Desktop w/230W PS	60
Mini Tower w/200W PS	38
Mid Tower w/230W PS	62
Mid Tower w/250W w/Display	72
Full Tower w/250W PS	90
Full Tower w/250W 2 Fans	140

MEMORY

1MB RAM (1x2)	**CALL**
1MB RAM (1x3)	**37**
4MB RAM (1x32)	**CALL**
4MB RAM (1x36)	**150**

CALL FOR OTHER ITEMS NOT LISTED.

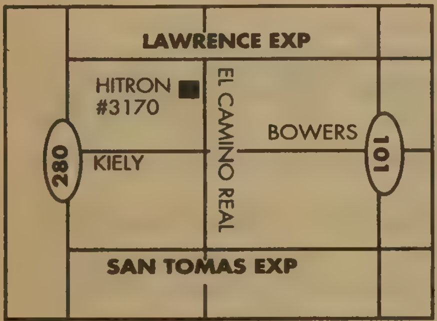
MULTIMEDIA PACKAGES

1) PANASONIC Dual Speed CD-ROM
SOUND BLASTER 16 Bit
With Items Below **$285**

2) NEC Triple Speed CD-ROM
MEDIA VISION Pro Audio
With Items Below **$525**

3) TOSHIBA Double Speed CD-ROM
MEDIA VISION Pro Audio
With Item Below **$499**

ABOVE 3 PACKAGES INCLUDE:
-Pair Of Stereo Speakers
-CD TITLES
 7th Guest
 The Animals
 Kodak Photo CD
 Chessmaster 3000
 US Atlas
 Mavis Teaches Typing



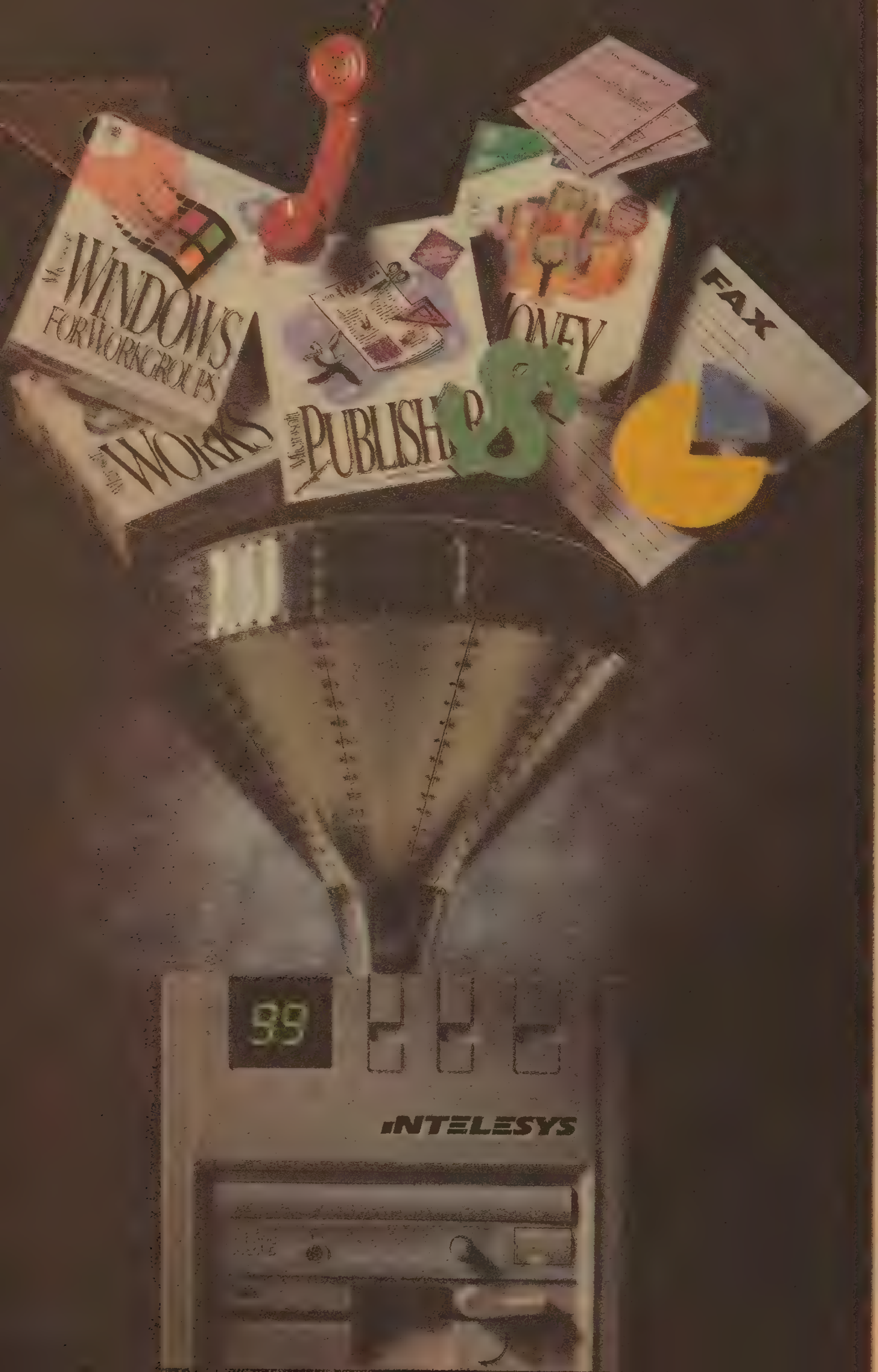
FOR MORE OPTIONS OR INFORMATION PLEASE CALL:

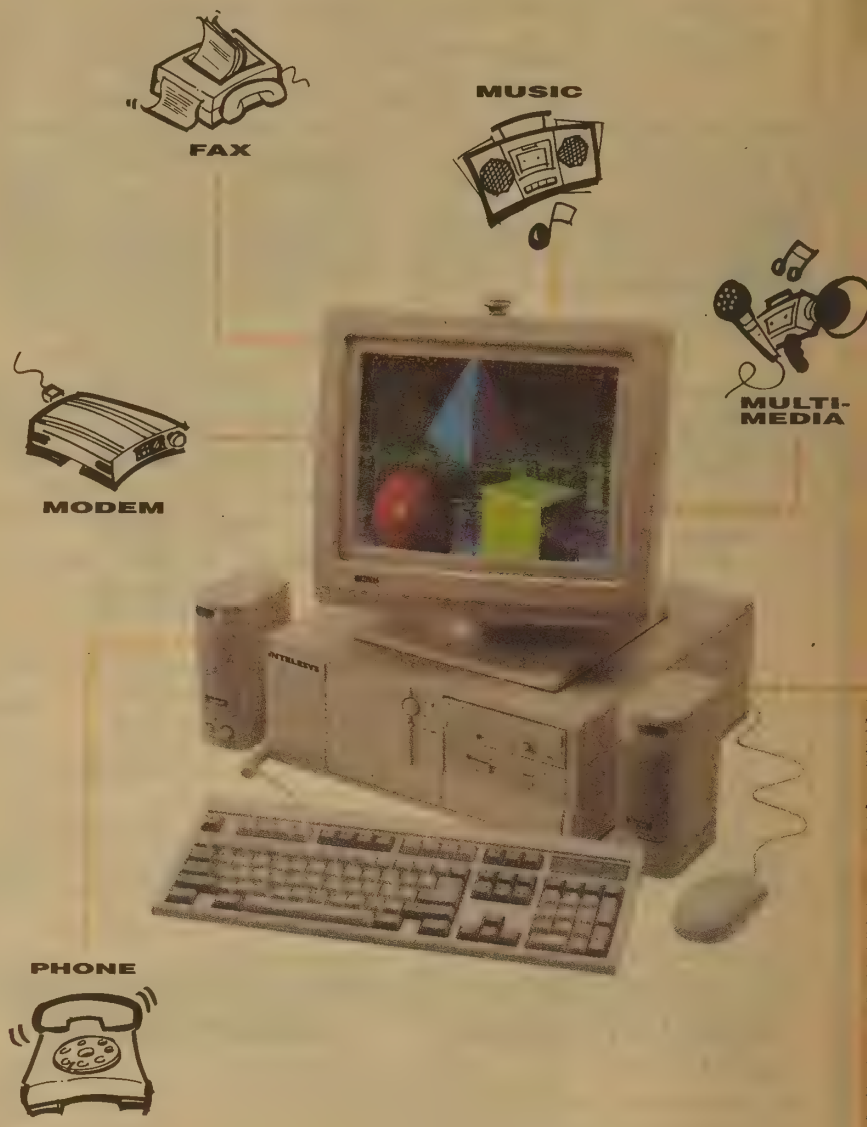
HITRON SYSTEMS

HITRON SYSTEMS
3170 EL CAMINO REAL
SANTA CLARA, CA 95051
(BETWEEN LAWRENCE EXP. & SAN TOMAS EXP.)
TEL: (408) 261-2695 • Fax: (408) 261-2698
MON-FRI: 9-6 SAT: 10:30-4:30

• All Special Items Order Non-Refundable • Prices Subject To Change w/o Notice • Not Responsible For Typos • Price Reflects Cash Discount

What other companies consider optional, we consider standard


WINDOWS FOR WORKGROUPS
WORKS
PUBLISHER
MONEY
FAX
99
INTELESYS


FAX
MUSIC
MULTI-MEDIA
MODEM
PHONE
INTELESYS

In today's world you demand a lot from your computer. Why not everything? Why not get all the capabilities you need, all the features you want, all in one system? Take your choice of any Intelesys system and you'll get exactly that.

With Intelesys, you get a super fast system complete with preloaded business and entertainment software, an Intelesys communication controller with standard features including a fax modem, a data modem, telephony, a CD ROM and a monitor. Intelesys systems come ready to answer your phone, fax your documents, play music, balance your budget and run your business. All you need to do is plug it in, turn it on, and enjoy. As you can see, this process leaves no room for confusion.

All systems are multimedia configurations and include over $600.00 in Microsoft software!*

P560 $1999

- Intel Pentium 60MHz CPU
- 8MB RAM, 256 Cache
- 420MB 13ms IDE Hard Disk Drive
- PCI/IDE Interface
- High Performance PCI Local Bus
- PCI/LB Graphics with 1MB RAM
- 1.44MB 3 1/2" Diskette Drive
- 9600/2400 Fax Modem
- 15" Non-Interlaced, High Definition Monitor
- 101 Mechanical Keyboard
- Microsoft Ergonomical Mouse
- MS-DOS Windows for Workgroups
- MS-Works/MS-Money/MS-Publisher

intel inside

P560M $2495

- Intel Pentium 60MHz CPU
- 8MB RAM, 256 Cache
- 420MB 13ms IDE Hard Disk Drive
- PCI/ISA IDE Interface
- High Performance PCI Local Bus
- PCI/LB Graphics with 1MB RAM
- Double Speed CD-ROM
- 1.44MB 3 1/2" Diskette Drive
- 14.4 Fax/14.4 Modem
- Telephony/Voice Mail/Phone Answering
- 16-bit Sound/MIDI Hi-Fi Sound Synth. & Spkrs.
- 15" Non-Interlaced, High Definition Monitor
- 101 Mechanical Keyboard
- Microsoft Ergonomical Mouse
- MS-DOS Windows for Workgroups
- MS-Works/MS-Money/MS-Publisher
- MS-Encarta (Encyclopedia)

intel inside

P566 MHz w/above configuration $2595
P590 MHz w/above configuration $2795

D250 $1499

- DX2/50 MHz CPU
- 4MB RAM, 256 Cache
- 420MB 13ms IDE Hard Disk Drive
- High Perf. VLB w/ Onboard IDE Interface
- VLB Graphics with 1MB RAM
- Double Speed CD-ROM
- 1.44MB 3 1/2" Diskette Drive
- 9600/2400 Fax/Modem
- 16-bit Sound/MIDI Hi-Fi Sound Synth. & Spkrs.
- 14" Non-Interlaced, High Definition Monitor
- 101 Mechanical Keyboard
- Microsoft Ergonomical Mouse
- MS-DOS Windows for Workgroups
- MS-Works/MS-Money/MS-Publisher
- MS-Encarta (Encyclopedia)

D266 MHz w/above configuration $1649

BL75 $1699

- IBM Blue Lightning 75 MHz CPU
- 4MB RAM, 256 Cache
- 420MB 13ms IDE Hard Drive
- High Perf. VLB w/ Onboard IDE Interface
- VLB Graphics with 1MB RAM
- Double Speed CD-ROM
- 1.44MB 3 1/2" Diskette Drive
- 14. 4 Fax/14.4 Modem
- Telephony/Voice Mail/Phone Answering
- 16-bit Sound/MIDI Hi-Fi Sound Synth. & Spkrs.
- 14" Non-Interlaced, High Definition Monitor
- 101 Mechanical Keyboard
- Microsoft Ergonomical Mouse
- MS-DOS Windows for Workgroups
- MS-Works/MS-Money/MS-Publisher
- MS-Encarta (Encyclopedia)

BLUE LIGHTNING

BL100 $1999

- IBM Blue Lightning 100 MHz CPU
- 8MB RAM, 256 Cache
- 420MB 13ms IDE Hard Drive
- High Perf. VLB w/ Onboard IDE Interface
- VLB Graphics with 1MB RAM
- Double Speed CD-ROM
- 1.44MB 3 1/2" Diskette Drive
- 14. 4 Fax/14.4 Modem
- Telephony/Voice Mail/Phone Answering
- 16-bit Sound/MIDI Hi-fi Sound Synth. & Spkrs.
- 14" Non-Interlaced, High Definition Monitor
- 101 Mechanical Keyboard
- Microsoft Ergonomical Mouse
- MS-DOS Windows for Workgroups
- MS-Works/MS-Money/MS-Publisher
- MS-Encarta (Encyclopedia)

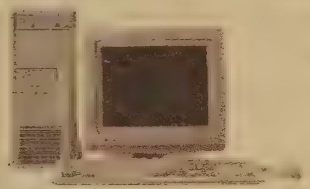
BLUE LIGHTNING

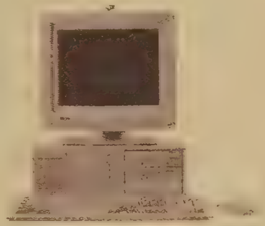
SL66 $1399

- IBM SLC 66 MHz CPU
- 4MB RAM, 128 Cache
- 420MB 13ms IDE Hard Drive
- High Perf. VLB with IDE Interface
- VLB Graphics with 1MB RAM
- Double Speed CD-ROM
- 1.44MB 3 1/2" Diskette Drive
- 9600/2400 Fax/Modem
- 16-bit Sound/MIDI Hi-Fi Sound Synth. & Spkrs.
- 14" Non-Interlaced, High Definition Monitor
- 101 Mechanical Keyboard
- Microsoft Ergonomical Mouse
- MS-DOS Windows for Workgroups
- MS-Works/MS-Money/MS-Publisher
- MS-Encarta (Encyclopedia)

SLC2

**The P560 is not a multimedia system and does not include Encarta.*





To order call: 800-577-2486

WINDOWS for Workgroups
PUBLISHER
MONEY
WORKS
ENCARTA

24 HOUR TECHNICAL SUPPORT

OPTIONAL

30 Day $Back Guarantee

3 Year Warranty
1 year on-site
2 year depot warranty

Microsoft Windows Ready-to-Run

energy
EPA POLLUTION PREVENTER

MADE IN THE USA

INTELESYS

By Intelligent Computers and Technologies

Setting New Standards

46231 Landing Parkway • Fremont, California 94538
Phone: (800) 577-2486 • Fax: (510) 226-9363

We are open Mon. through Fri.: 8:30am to 5:30 pm, Sat.: 10:00 to 4:00 PST. Fax lines are open 24 hours. Purchase Orders accepted on approved credit. Corporate government and university PO's welcome. Prices are in US Dollars, FOB Fremont, California. Prices and specifications subject to change. No refunds on shipping and handling charges, opened software. Monitors are non-refundable except with systems. Absolutely no returns without RMA return address authorization. The Intel Inside Logo, Intel and Pentium are trademarks or ® of Intel Corporation. IBM is a trademark or ® of International Business Machines. Microsoft is a trademark or ® of Microsoft corporation. Other trademarks are of their respective owners. MT071394

Attention Corporate/ Government Agencies and Universities!

"Try Before You Buy"

Intelesys now offers a 30-day **"Try Before You Buy"** program.

Upon approval, your organization can truly evaluate systems prior to committing to large purchases. If not completely satisfied, simply return the system.

No obligation. For more information, call our sales office at:

1 (800) 577-2486

REALIZABLE FANTASIES • BY JIM WARREN

Reality Check!

This concerns a trivially realizable fantasy for opening government, plus the other side of a lune-tunes fantasy, badly in need of balance.

Citizens' Fax-Modems

Changes and amendments to legislation often occur much too fast for concerned citizens to receive *useful* updates by first class US Mail, much less permit *effective* snail-mailed responses from the public. Online access to legislation, *sans* legislative fees, is helping to remedy the timely-update problem. But effective citizen response remains difficult.

If you can find out about current legislation in time, you can telephone your comments. But calls are received by staff and recorded by them in brief notes—or, often, merely as check-marks. The substance of your points is often lost—especially by everyone except perhaps the staffer with whom you speak.

Telegrams are better than phone calls—but only if you can afford them.

For a number of reasons, individualized 1- and 2-page letters are—*by far!*—your most effective communication to elected officials (if you can't send money or bird-dog 'em, face-to-face). Your comments are recorded in their complete, original form. They can be easily copied to others. Supportive legislators can wave them in hearings—very important.

But often letters carried by the postal-escargot arrive either too early before a hearing and are forgotten, or too late—after a vote—and are ignored.

However, I don't know of a single legislator—state or federal—who doesn't have a tax-purchased fax machine in their office connected to a tax-funded phone line. And more and more citizens have fax-modems, or at least access to free or fee fax machines.

By fax, citizens can send their comments in their most useful, written form—and have them arrive not too early and not too late. *If* they can get their elected representative's fax number.

To my amazement—and the outrage of almost every citizen group to whom I have mentioned it—a number of legislators still refuse to publicly disclose their fax numbers (we suspect contributors and favored lobbyists may get better treatment than the "mere" voters)!

It's time for elected officials to disclose their tax-supported fax numbers every time they disclose phone numbers—or their names.

Also, local, state, and federal elected officials and/or their staff are starting to come online—but many are *very* coy about their tax-funded email addresses.

Elected officials who desire the advantages of tax-funded email should arrange for and publish a public email address for their office—with input to it handled at least as efficiently as incoming telegrams. (There is a difficult policy question: Should email receive more responsive treatment than snail-mail? It's customary in the medium, but it is hardly equal treatment for citizens.)

SPA estimates of revenue lost to software piracy are about as accurate as the number of sexual conquests stated by teenage boys.

To do any less than disclose these modern communications alternatives illustrates an arrogant and/or obsolete "representative" who needs to be replaced.

Pirate Fantasies

Beware! Flame alert!

The pack journalists of the advertising-supported establishment press continue to repeat—as though it was fact—the surely fictitious, unverified, and unverifiable Software Publishers Association self-serving mantra, alleging that the commercial software industry is losing "billions and billions" of dollars due to heinous software pirates.

Even the normally reliable *Wall Street Journal* is suckered into publishing such unlikely and unprovable fiction.

The implication seems to be that, if software piracy isn't stopped—by draconian measures including disregard of the 4th Amendment, "reasonable cause," and "presumption of innocence"—then all programmers will become fry-cooks; innovators will turn to gardening; our nation will become a wasteland; the Communist hordes will overrun the world (whoopps!—sorry, wrong specter); and Bill Gates will become homeless. All that and worse.

Estimates of revenue lost to software piracy are about as accurate as the number of sexual conquests stated by teenage boys, or their estimates of the number of their peers who have guns in school—other fantasies similarly reported as though they were fact.

And of course, technologically illiterate, well-lobbied legislators stampede blindly forward, eager to become stalwart protectors of corporate profits—and their tantalizing PAC treasuries—at least in this toll-

NEWEST 64 BIT SUPER SPEED SVGA SYSTEMS

PCI VLB

Multimedia 486-33 System

$1109

- 486-33 MHZ 128K cache
- 4 MB Memory Installed
- IDE/I/O (2HD/2FD 2S/P/G)
- 1.2MB Floppy Drive (Teac)
- 1.44 MB Floppy Drive (Teac)
- 200 MB Hard Drive
- Super VGA Card
- 14" 1024x768 SVGA Monitor
- Enhanced Case with Power Supply
- Microsoft Serial Compatible Mouse
- 101 Enhanced Keyboard
- CD-ROM & 16 Bit Sound Card
- A Pair of Speakers
- Complete Manual and Software Drivers
- 7 CD Titles

Monthly Special

Double Speed SVGA Cards:

Diamond Speed Star 64 ---- $150
Dash Spectra 64 ---- $119
Orchid Kelvin 64 ---- $140

WinMark up to : 45.2

PENTIUM 90/66/60 Mhz VLB/PCI

- Intel 90/66/60 Mhz CPU w/Fan, w/ZIF Socket
- 16K Internal Cache, 256K External Cache
- 8MB Memory extentable up to 128 MB
- 540 MB IDE Hard Drive
- Teac 1.2 MB Floppy Drive
- Teac 1.44 MB Floppy Drive
- Enhanced Super Local Bus IDE/I/O
- The Fastest Double Speed 64 Bit SVGA Card w/2M
- 15" N/I 1280 x 1024 Flat Screen Monitor
- Maxiswitch 101 Keyboard
- Full Tower Case w/250 W Power Supply
- Microsoft Mouse

ONLY
$ 2635/2395/2265

486 DX2-66/DX-33
VESA Local Bus 256K Cache

- Pentium Overdrive Socket Ready
- 4 MB Memory Installed
- 32 Bit VLB 2FDD/2HDD IDE Controller
- 2 Serial, 1 Parallel & 1 Game Port
- 1.2 MB Floppy Drive(Teac)
- 1.44 MB Floppy Drive(Teac)
- 340 MB IDE Hard Drive
- 32 Bit VLB Window Accelerator w/1M
- 14" 1024x768 SVGA Monitor .28 Non-Interlaced
- Mini Tower Case w/230W Power Supply
- ***Free Monitor Power Saving Option***
- ***Free Hard Drive Power Saving Option***
- ***Free Power Supply Power Saving Option***
- 101 Key Enhanced Keyboard
- Microsoft Compatible Mouse

$1172/$1049

Multimedia Package

- Panasonic or Mitsumi Double Speed CD ROM (250ms/300kb)
- Real 16 Bit Sound Card
- A Pair of Speakers 40W
- 7 CD Titles

only
$ 260

Free Installation

when You buy with Systems

MOTHERBOARDS W/CPU

Dash 486DX2-66/256K w/3VLB(ZIF)	$ 368
Diamond 486DX2-66/256K w/2VLB	$ 376
IBM SLC2-66/64K w/2VLB w/Math	$ 225
IBM SLC2-50	$ 155
Pentium 66 PCI 256K	$ 950
Pentium 60 VLB 256K	$ 795
486DX-33/128K w/3VLB	$ 237
486DX2-66/256Kw/3VLB	$ 362
486DX-40/128K w/3VLB	$ 248
486SX-25/128K w/3VLB	$ 157
486DX-33/64K ISA	$ 201
486DLC-40/64K	$ 142
386DX-40/128K	$ 85

VIDEO & NETWORK CARDS

TRIDEN VLB 1 MB	$ 63
TRIDEN 1MB CARD	$ 54
CIRRUS LOGIC VLB w/1MB Window Accelerator	$ 85
DIAMOND SPEED STAR 64 w/1M	$ 155
Dash Spectra 64 w/1M	$ 149
ORCHID Kelvin 64 w/1M	$ 145
NE-2000 COMPATIBLE 10 BASE-T/Coax	$ 35

*** PLEASE CALL US FOR CURRENT PRICE**

VLB 486 Local Bus Systems

486DX4-100 256K cache **$1425**	**486DX2-66** 256K cache **$ 941**	**486SLC2-66** 64K cache **$ 819**	**486DX2-50** 128K cache **$ 885**
486DX-40 128K cache **$ 838**	**486DX-33** 128K cache **$ 815**	**486SX-33** 128K cache **$ 771**	**486DX-33** 64K ISA **$ 795**

SYSTEM CONFIGURATION: ● Motherboard w/CPU ● 4 M RAM ● VLB IDE/I/O
● Teac 1.2 & 1.44 Floppy Drive ● VLB Local Bus w/1M SVGA Window Accelerator
● 250 MB Hard Drive ● 14" SVGA .28 N/I Monitor Add $180
● Mini Tower Case w/230W ● 101 Keyboard ● Microsoft Compatible Mouse

UPGRADES:
● 340MB Hard Drive ------add **$35** ● 420MB Hard Drive ----add **$55**
● 64 Bit SVGA Card w/1M ----add **$65** ● 64 Bit SVGA Card w/2M --add **$105**

TITLES

MS BOOKSHELF	$ 30
DOCTOR GAME SHAEWWARE	$ 13

CD ROM

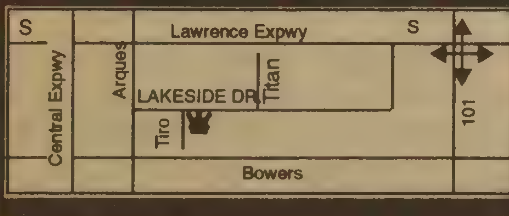
MITSUMI CD ROM w/Cable Double Speed	***$125***
PANASONIC CR-562(300KB/Sec) w/Cabe	$125
TOSHIBA 3401 INTERNAL w/Cable	$275

MISCELLANEOUS

96/24 FAX/MODEM Inter. w/Software	$ 39
144/144 FAX/MODEM Internal w/SuperFax	$ 77
CONNER 250MBTape Back-Up	$145
3M DC2120 120MB Tape	$ 16
3 Button Serial Mouse	$ 11
MS-MOUSE	$ 28

CONTROLLER CARDS

IDE 2FD/2HD/2S/1P/1G	$ 12
VLB IDE/I/O	$ 24
Promise DC-99M IDE w/512K Cache	$115
Promise DC-200 IDE Cache w/4HD/2FD	$ 95
Promise DC-4030 VLB IDE Cache w/4HD	$115
Promise IDE/IO VLB	$ 25
Adaptec 1522/1522K SCSI	$ 88/$138
Adaptec 1542C/1542CK SCSI	$175/$230
Adaptec 2842 VESA SCSI Controller	$270



Legend Computer
470A Lakeside Drive
Sunnyvale, CA 94086
TEL: (408)720-0818
FAX: (408)720-0819
Business Hours:
M-F 9-6
SAT 10-4

- **Custom Configuration Welcomed**
- **PC Components Available**

Please Call !!

*** Prices, availability and terms are subject to change without notice**

*** Not responsible for typos**
*** Prices Above Reflect Cash Discount**

free instance that won't degrade tax revenue nor offend organized labor. ("PAC"—political action committee, the self-serving structures created by and for the financial benefit of incumbents and groups-with-loot; the group-purchase clubs where special-interest payoffs have replaced public-interest legislation.)

But nary a note is written about how most folks wouldn't buy most of the software they pirate—just as vile video pirates wouldn't pay $30 a pop (or much more!) for *legal* copies of million-dollar Hollywood blockbusters, and the satellite pirates of the '80s have *not*, in fact, subscribed to most of the five hundred channels that they were perusing before scrambling became good enough to defeat them. However, can you name a single movie producer or broadcaster that has gone broke *because* of video pirates? Nahhh, they just haven't optimized their greed.

Nor do I know of a single software publisher that has been bankrupted by piracy. A much *greater* threat has been from litigious attacks against small, ill-funded publishers by their very wealthy competitors—but Congress has shown little interest in leveling *that* playing field. (There *was* the case, a few years ago, of the US Secretary of State providing pirate copies of hyperpriced, citizen- and case-tracking proprietary software to the Israeli government. But piracy by government is a different matter—ask any taxpayer.)

And the inflammatory articles and testimony about the horrors of piracy never mention that few computer owners and almost no computer professionals, nor schools, nor colleges, nor universities could survive systematic searches of their computers, much less the forfeiture (for use by the raiding agencies) of all systems containing any contraband software—searches and seizures like those that were very selectively conducted by the Secret Service in 1990, and continue to *selectively* occur at the local, state, and federal level.

And no word is even *whispered* of the harm that *effective* prohibitions against pirated programs and "stolen" source code would inflict on continuing innovation and rapid development in the software industry—results that benefit everyone. *All* software is built on the software that came before it—and only the wealthiest innovators can afford to buy all of it.

Flame: Off!

Now, *don't* take this as my condoning unconstrained software piracy. Hell, I sit on the board (so far) of the fifth-largest microcomputer software publisher in the world, and we *vigorously* pursue software pirates.

It's just that—given the deluge of wildly one-sided media reports, and lunatic pronouncements of billions in lost revenues—I thought it was time to offer one tiny presentation of the rest of the story. ■

Copyright © 1994 by Jim Warren; email/jwarren@well.com; 345 Swett Rd., Woodside, CA 94062. Permission herewith granted to copy-in-full for any nonprofit use.

Industrial PC Solutions

19" Rack Mount System
PRICE IS BASED ON THE CONFIGURATION YOU REQUIRE

19" Rack Mount Enclosure
- 20 MODELS, UP TO 20 SLOTS
- UP TO 8 DRIVE BAYS

Rack System w/Keyboard and Monitor
- MONOCHROME OR 10" VGA
- 10.5" X 19" X 24"
- MOTHER BOARD OR 8 SLOT PASSIVE BACKPLANE BOARD
- 5 HALF HEIGHT 5.25" BAYS

6-Slot Node IPC Enclosure
- COMPACT INDUSTRIAL PC
- WALL MOUNT PC CONTROLLER
- DRIVE HOUSING FITS 3.5" FDD & HDD
- 150W POWER SUPPLY

Monitor Enclosure
WE CARRY MONITOR ENCLOSURES FOR 14" & 17" MONITORS

Rack Mount Keyboard
FULL TRAVEL KEYBOARD
TRACKBALL KEYBOARD AVAILABLE

CPU BOARDS

Upgradable All-In-One CPU Card
- 386DX-33 to 486DX2-66 (AMI BIOS)
- 256KB Write back cache memory
- IDE HD/FD controller, 2S/1P, keyboard adapter on the board.

Half-Size All-In-One 486 CPU Card with Flash/ROM Disk
- 486SX-25 to 486DX33, 486DX2-50/66
- Optional Flash/RAM/ROM disk module or flatpanel/CTR VGA module
- IDE HD/FD controller, 2S/1P, keyboard adapter on the board

Backplane Board
ALL 16 BIT BACKPLANE BOARD
- 3, 4, 5, 6, 8, 12, 14, 18, 20 SLOT
- 14 SLOT SEGMENTED 6,4,4
- 18 SLOT SEGMENTED 5,4,4,5
- 20 SLOT SEGMENTED 5,5,5,5

AT Expansion Bus - Interconnect Kit

Warranty Includes 1 year parts and labor.

J&K TECHNOLOGY
43224 Christy St., Fremont, CA 94538
510-226-9484 Fax: 510-226-9482
MON. - FRI. 8AM-6PM

Libre
Service Computer Inc.

No Down Financing Available

•Apply for the Libre-Credit Card
(with no application fee)

Advertised prices based on 3% cash purchase discount.
Price subject to change without notice.
Check for our everyday low price and other new products.

FREMONT
48890 Milmont Drive, 106D
Fremont, CA 94538
510-438-0402
Fax: 510-440-9566
Tue-Sat 10 am to 6 pm

SACRAMENTO
5112 Madison Ave.
Sacramento, CA 95841
916-349-8200
Fax: 916-349-8299
Tue-Sat 10 am to 6 pm

SAN FRANCISCO
1569 Sloat Blvd. Suite 300
(Second Floor of Crown Book)
San Francisco, CA 94132
415-731-8988
Fax: 731-8967
Tue-Sat 10 am to 6 pm

VESA Local BUS

VL 486-DX 2-66 Mhz AMD, 256K Cache; 4 MB; co-processor; Mini tower; VLIDE 2S, 1P, 1G; 1.2 & 1.44 floppy drives; 420 MB hard drives; VL SVGA card / 1 MB; 14" SVGA monitor 0.28; 101 keyboard. (P24T ready)

Monthly Sale $1,149

IBM 486 BLX 75Mhz 256K Cache

Monthly Sale $1,199

IBM 486-50Mhz, 4MB, co-processor, Mini tower, IDE-I/O, 1.44 FD, 250MB HD, SVGA card/1MB, 14" SVGA 0.28 monitor, 101 KB

Monthly Sale $899

Motherboard with CPU

386DX-40Mhz 128K	$99
*486DX-40VL 256K(AMD)	$270
*486DX2-66VL 256K(AMD)	$370
486SLC2-66VL 128K	$250
*486BLX-75VL 256K	$350
Pentium P5-66PCI 256K	$999

Video Options:

Mono graphic card	$15
SVGA card /1MB	$55
SVGA VL /1MB	$80
SVGA monitor .39mm	$199
SVGA monitor .28mm	$230
SVGA monitor non-int	$250
15" SVGA .28mm	$315

PCMCIA

High speed Data/Fax/Voice/Cellular PCMCIA Cards

- Data/Fax at 14.4K with voice support
- Rockwell/Cirrus Logic chip set
- PCMCIA 2.X Compatible type II

new Special $189
w/voice $249

PC card reader/writer $199

Run all your PC cards at full speed on your desktop

HD & Floppy Drives

170 MB HD (IDE)	$190
250 MB HD (IDE)	$200
340 MB HD (IDE)	$210
420 MB HD (IDE)	$230
540 MB HD (IDE)	$300
1.2 MB floppy drive	$ 46
1.44 MB floppy drive	$ 36

Vesa Local Bus 486 Multi-media System

4 MB; Medium Tower; 1.2 & 1.44 FD; 2S, 1P, 1G Port; 420 MB HD; SVGA Card(1MB); 14" SVGA monitor 0.28; 101 KB; 16 bit sound card; Double speed CD Rom + Title; & Speaker.

IBM 486 SLC2-66 128K Cache	$1,349
*AMD 486 DX2-66 256K Cache	$1,449
*IBM 486 BLX-75 256K Cache	$1,499

*(P24T Ready)

Multi-media Kits

Sound Blaster 16/16MCD	$99/$139
Sound Blaster SCSI-2 W/ASP	$139/209
Media Magic ISP-16	$79
Mitsumi Double Speed CD Rom	$139
NEC Triple Speed (SCSI)	$369
Toshiba XM 3401B (SCSI)	$299

Pentium P5

Pentium-66Mhz w/fan, PCI controller 4MB, Medium tower, 1.2 & 1.44 floppy drives, 420 MB hard drive, Video card w/2 MB V-RAM, 14" SVGA 0.28mm monitor, 101 keyboard

Best Price Performance

$1,999

Printers

SAMSUNG

24 pin dot matrix (color)	$ 199
8000 Laser, 1200 DPI	$1749

HP

DeskJet Portable	$ 329
DeskJet 520/500C/560C	$299/399/599
LaserJet 4/4L/4M/ML	$1389/679/1899/1029
4P/4MP/1200C	$979/1379/1369

Others

IDE controller w/IO	$15
VLIDE-I/O	$20
High speed VLIDE-I/O	$39
Serial mouse	$12
14.4 fax modem	$99
28.8K fax modem	$159
101 keyboard	$20
Mini-tower case	$45
Medium tower case	$65
250MB tape back up	$160
Great Selection of CD Titles	Call

NEW SERVICE PROGRAMS & UPGRADE SPECIAL

- **On-site Warranty**
- **Repair & Upgrade Service**
- **Used Computer Trade-in Program**
- **Network Consultation & Installation**
- **We Buy/Sell Used Monitors, Please Call.**
- **Special Sale:**
  Upgrade Your 286/386 to 386/40DX 128K Cache w/4MB for $280.00 or 486 SLC2/66 128K Cache W/4MB for $450 Labor Included.

BY BROCK N. MEEKS

CyberWire Dispatch It's Baa-aack...

Just When You Thought It Was Safe, Digital Telephony Returns With A Vengeance

Jacking in

from the "Cancer Among Us" port:

At some point today (August 9), Senator Patrick Leahy (D-Vt.) will take control of the Senate floor, tug once on his modestly priced suit, run a hand through his thinning silver hair, adjust the glasses on his made-for-C-Span face, and formally recommend that the privacy rights of your most cherished communications—your telephone calls—be subjected to a kind of digital chemotherapy in the form of his "Digital Telephony Bill."

This bill will forever mandate that our nation's communications networks be made "wiretap ready" at the behest of the Attorney General, walking point for the Federal Bureau of Investigation. This bill ends the FBI's two-year running battle to infect every form of communications network possible—from the tiny switchboard at your local Jiffy Lube shop to the entire US Internet infrastructure—with a kind of easy access wiretap software. The FBI didn't get the Internet (or any other online system) covered under this bill, but it damn near got every other kind of telecommunications provider.

And let's be clear what we're talking about here: This "wiretap software" is digital cancer. It will never go into remission; it will forever grow and search out new technologies to "infect."

Enter Senator Leahy's "digital chemo" bill. Like its analog kin, Leahy's digital chemo will make you sick; it's a poison to be willfully ingested for the "greater good." You go through hell in the hopes that the means justifies the end.

So, although the FBI got what it wanted—a codified, put-up-or-shut-up piece of legislation that mandates wiretap access—it didn't get nearly all it wanted. Thanks to Leahy and Rep. Don Edwards (D-Cal.), the FBI will have to jump through a myriad of hoops to gain their hard-fought victory of being able to eavesdrop on digital conversations.

What's Hot, What's Not

FBI Director Louis Freeh is bankrupt. That is, his political capital is bankrupt. Freeh was so hot for this bill that he personally lobbied virtually every member of Congress.

Freeh is charismatic. Forget C-Span; Freeh has a face the big screen would love. What's curious is that it must have been these superficial features that gained him support for a wiretap bill, because he sure as hell couldn't cough up statistics to back it up.

Despite promises by the FBI that it has had "hundreds" of investigations thwarted by digital technologies, it has *never* produced a single shred of evidence beyond limp anecdotes.

And in fact, the United States Telephone Association (USTA) is still waiting for documentation of these "hundreds" of incidents, according to Larry Clinton, executive director for governmental affairs for USTA. An FBI representative had promised to produce such records for the USTA during a recent privacy roundtable sponsored here in Washington by the Electronic Privacy Information Center (EPIC). The documentation never arrived. Clinton says he never even heard again from the FBI on the matter.

"We have yet to see any evidence that this bill is necessary," said Dave Banisar, EPIC policy analyst. "We still think the principle behind (the bill) is dubious, that being that the FBI should be in the business of mandating that surveillance be built into all networks."

Name Your Poison

The bill presents a dilemma to civil liberties groups. On principle, they oppose it. But without the Leahy/Edwards bill, the FBI would have cake-walked through the nation's privacy rights. So the current situation turns out to be a kind of "name your poison" scenario.

Without a bill, it's likely that the FBI could have had their originally nefarious proposal snuck into law as a rider on the crime bill, allowing it to become law through the "back door," and with little public debate.

At least with the Leahy/Edwards package the FBI has to work for everything they get. The bill is chock-full of checks and balances or "outs" as one telephone executive said.

There are, for example, several ways for the telephone companies to stall the mandates of installing the wiretap software, including court action, FCC proceedings, and extensions granted for compliance. Although the bill requires that companies install such wiretap access software within four years, even a pedestrian telecommunications lawyer could stall compliance for at least six years. A hotshot attorney could mess with the FBI and its demands for even longer.

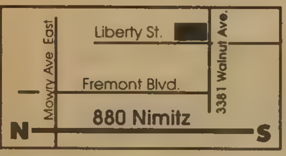
Although checks and balances are a primary firewall, "it's still a troubling precedent to have government make industry think first about making their networks wiretap ready," said Jerry Berman, policy director for Electronic Frontier Foundation (EFF).

EFF's position on the bill is "complicated by the fact that we don't think a digital telephony bill is necessary," Berman said. "We're not opposing this legislation," he said. "We support the privacy provisions. But is has to be this version and this package" that passes, he said.

EFF succeeded in negotiating stronger privacy protection for transactional data into the bill. Namely, the FBI now has to get a court order to gain access to even the

Continued on page 298

COMP EXPRESS



of Fremont

(510) 794-9311

VISA MasterCard
No Surcharge

3381 Walnut Avenue
Fremont
M-F 9-6 pm • Sat. 11-5

WE ABSOLUTELY, POSITIVELY WILL NOT BE UNDERSOLD

NOTEBOOKS

COMPAQ
LTE ELITE 4/40 CX

$3495

Mdl 170 4 MEG RAM
8.4" Active Color Matrix
DX2/40 MHz

NEW

ZEOS
Dual Scan Color

$1695

AST.

Zeos Colornote
486SX-33 MHz Color Notebook Computer with 120MB Hard Drive, 4MB of RAM, 1.2MB floppy drive, 8KB of internal cache, slot for Type I, II, or III PCMCIA cards, double scan STN color VGA LCD screen, battery and AC adapter included.

AST. Advantage Explorer Notebooks

$1595

COMMON FEATURES
- Intel 486SX25 Processor
- 120MB hard drive
- 4MB RAM expandable to 20MB
- Local Bus video with 512K graphics memory
- 3.5" 1.44MB floppy disk drive
- Integrated trackball
- One Type III PCMCIA expansion slot (compatible with type II cards)
- AC adapter/battery charger & battery included

Dual Scan Color

ADVANTAGE! NOTEBOOKS

$799

COMMON FEATURES
- AMD AM386 SXL 25MHz processor
- 4MB RAM, expandable to 8MB
- VGA "paper white" display with 32 shades of gray
- 60MB lightweight hard disk drive
- NiCad battery pack
- 1.44MB floppy disk drive
- MS-DOS 5.0 from AST
- 115/230V auto sensing AC adapter/battery charger
- Backlit, Liquid Crystal Display (LCD)
- Also available in color

AST.

NCR NoteBook

$1445
$1595
$1695

486SX-25 MHZ Color Laptop Computer with passive STN dual scan color LCD screen, 80, 120 or 170MB hard drive, 4MB of RAM upgradeable to 20MB, 8KB of internal cache, longer life nickel metal hydride battery, high performance local video bus, portable pointing device, super VGA output, PCMCIA slot, removeable hard drive, 1.44MB floppy drive, AC adapter and power cord.

Dual Scan Color

NCR NOTEBOOK

$2195

- 486SX-25 MHz Color Laptop Computer with passive STN active matrix Color LCD Screen
- 170MB Hard Drive
- 4MB of RAM upgradeable to 20MB
- 8KB of Internal Cache
- Longer life nickle metal hydride battery
- High performance local video BUS
- Portable pointing device
- Super VGA output
- PCMCIA slot
- Removable Hard Drive
- 1.44MB Floppy Drive
- AC Adapter and power cord

9.5" ACTIVE MATRIX COLOR

DIGITAL NOTEBOOK

$949
$899

- 386SL25
- 4MB expandable to 20MB
- 3.5" 1.44 floppy disk drive
- Removable hard drive
- 60MB or 120MB hard drive
- 2 PCMCIA Type II slot
- Includes 1 serial port, 1 parallel port, one keyboard mouse & one VGA monitor
- Smart point cableless trackball technology
- Hot Swap
- Upgradeable to 486SL33
- Simultaneous display with an external monitor

AST. PowerExec Notebooks

Passive Color $1395
$1099

COMMON FEATURES
- 486SL25 CPU
- 120MB
- 3.5" 1.44MB floppy drive
- 4MB RAM expandable to 32MB
- Removable hard drive
- Monochrome
- Upgrade display to passive or active color
- 2 PCMCIA Type II slots
- Smartpoint cableless trackball technology
- 64KB cache memory
- NIMH battery pack
- 512K video memory

AST. AST NOTEBOOKS

COMMON FEATURES:
- Intel 386SL25
- 9.5" Diagonal screen size
- 2MB RAM
- 64 gray shades supported
- 3.5" 1.44MB Floppy Drive
- 60MB or 120MB Hard Drive
- 64KB integrated cache
- One PCMCIA Type II expansion slot
- Super VGA external monitor support
- 256K (DRAM) graphics memory

SOFTWARE INCLUDED:
- MS DOS 6.0
- Windows for Pen

ACCESSORIES INCLUDED:
- Pointing device (cordless battery-operated pen)
- NiCad rechargeable battery pack
- AC adapter

$749
$699

AST. Bravo Notebooks

$2195

COMMON FEATURES
- Intel 486SX/25 Processor
- 4MB RAM expandable to 20MB
- Local Bus video; 512K video memory
- 170MB hard drive
- 3.5" 1.44MB floppy disk drive
- 1 PCMCIA Type III slot (compatable with Type II cards)
- Integrated trackball
- AC adapter & NIMH battery included
- Includes 1 serial, parallel, mouse, VGA external monitor, keypad/keyboard ports

Active Color Matrix

AMBRA SN425 Notebook

$949

- 486SX/25
- 4MB RAM - expandable to 20MB
- 80MB Hard Drive
- 8.2" Monochrome LCD
- Trackball
- MS-DOS 6.0
- Windows 3.1
- Carrying Case
- Weighs only 4 pounds
- 1.44 Disk Drive

NEC 486DX/2 40MHz
VERSA E Series Notebook

$3195

- 9.5" Color TFT Active
- 250MB Hard Drive
- 4MB RAM
- 6.9 lbs.
- DOS 6.2
- Windows 3.1

DESKTOPS

AST. ADVANTAGE! PRO DESKTOP

$1099

- 486DX33
- 340MB Hard Drive
- 3.5" 1.44MB & 5.25" 1.2 floppy drives
- 4MB RAM expandable to 64MB
- Four 16-bit expansion slots
- 101 Key Keyboard
- Data/Fax modem included
- Local Bus
- 1MB Graphics Memory
- SVGA Monitor .28NI

AST. ADVANTAGE! PRO

COMMON FEATURES
- 4MB RAM expandable to 64MB
- Four 16-bit expansion slots
- 101 Key Keyboard
- Monitor Included

486SX25
- 170MB HD
- 3.5" 1.44MB F.D.
- Sound Card/CD

$999

486SX33
- 240MB HD
- 3.5" 1.44MB & 5.25" 1.2MB F.D.

$999

IBM
PS/Valuepoint
486DX-33/DX2-66

- 4MB RAM
- 240MB Hard Drive
- Windows, DOS, Mouse
- Keyboard
- 1.44 Floppy Drive
- SVGA .28 NI 1280x1024 Monitor

$1099/
$1395

intel inside

IBM
PS/Valuepoint
486DX-33/DX2-66

- 8MB RAM
- 340MB Hard Drive
- Windows, DOS, Mouse
- Keyboard
- 1.44 Floppy Drive
- SVGA .28 NI 1280x1024 Monitor
- Tower Case

$1395/
$1695

intel inside

DATA PRODUCTS LASER PRINTER

$699

- 9PPM
- PostScript Level II
- 2MB RAM
- PC/Apple Compatible
- Envelope Feeder Included

IBM PS/Valuepoint
486SX/33

$999

- 4MB RAM
- 245MB Hard Drive
- Windows, DOS, Mouse
- Keyboard
- 1.44 Floppy Drive
- SVGA .28 NI 1280x1024 Monitor

intel inside

CLEARANCE ITEMS • LIMITED QUANTITIES

ZEOS

$899

Zeos Freestyle
486SL-25 MHz Notebook Computer with 120MB hard drive, 4MB of RAM, carrying case, 1.44MB floppy drive, battery and AC adapter included.

ZEOS

$699

Zeos Freestyle
386SL-25 MHz Notebook Computer with 130MB hard drive, 2MB of RAM, carrying case, 1.4MB floppy drive, battery and AC adapter included.

DELL 486 System

$629

HARDWARE
- 486SX/25
- 120MB Hard Drive
- 4MB of RAM
- 1.2 & 1.44 Floppy Drive
- VGA Monitor (Demo) included

intel inside

Compaq 386 LTE 80MB + Docking Station	$1195
HP DeskJet	
Portable Battery	$29
Cut Sheet Feeder	$39
Carrying Case	$59
QMS PS 825 Dual TrayPostScript	$1295
Thumbelina Portable Mouse	$19
Lotus 123 R 3.1	$89
Media Vision CD16	$149
Sharp Laser Printer 9500H	$399

Prices Subject To Change • Bring Ad To Get These Prices • Not Responsible For Typographical Errors

PENTIUM™!... "TOP CHOICE" For the information superhighway!

Fast Processing Is Key To Avoiding Gridlock On The Information Superhighway!

CATCH HD...YOU CATCH THE WORLD!

intel inside
pentium™
PROCESSOR

- ***Intel Pentium 90MHz Processor***
- *Intel Neptune Chipset*
- *256KB External Cache*
- *8MB 72-pin RAM (Max 128MB)*
- *1.2MB FDD*
- *1.44MB FDD*
- *424 MB IDE HDD*
- *Enhanced IDE Controller*
- *2-16550 High Speed Serial Ports*
- *1 Parallel Port*
- *Tsens Lab ET-4000 PCI 64Bit Video Card w/2MB*
- *Zoltrix 14400 bps High Speed Internal Fax Modem*
- *Mid Tower Case w/230W Power Supply*
- *15" 1280x1024 Non-interlaced Flat Screen Monitor, .28 dpi*
- *101-key Keytronic Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*
- *Free America Online*
- *Free PFS: Windows Works*

$2660

PENTIUM PCI Online System

- ***Intel Pentium 60MHz Processor***
- *Intel Mercury Chipset*
- *256KB External Cache*
- *8MB 72-pin RAM (Max 128MB)*
- *1.2MB FDD*
- *1.44 MB FDD*
- *424 MB HDD*
- *Enhanced IDE Controller*
- *2-16550 High Speed Serial Ports*
- *1 Parallel Port*
- *Cirrus Logic PCI Video Card w/2MB*
- *Zoltrix 14400 bps High Speed Internal Fax Modem*
- *Mid Tower Case w/230W Power Supply*
- *14" Non-interlaced Monitor*
- *101-key Enhanced Keyboard*
- *3 Button Serial Mouse*
- *Free Mouse Pad*
- *Free America Online*
- *Free PFS: Windows Works*

$1975

Featuring the world's fastest PC processor

intel inside
pentium™
PROCESSOR

Best Performance for all PC software.
Quality you can count on.
Available now.

The Intel Inside Logo and the Intel Pentium Logo is a registered trademarks of Intel Corporate. All products are trademarks of their respective companies.

- ***Intel Pentium 90MHz Processor***
- *Intel Neptune Chipset*
- *256KB External Cache*
- *8MB 72-pin RAM (Max 128MB)*
- *1.44MB FDD*
- *424 MB IDE HDD*
- *Doudle Speed Internal CD-ROM*
- *Enhanced IDE Controller*
- *2-16550 High Speed Serial Ports*
- *1 Parallel Port*
- *Tsens Lab ET-4000 PCI 64Bit Video Card w/2MB*
- *16 Bit Stereo Sound Card*
- *Zoltrix 14400 bps High Speed Internal Fax Modem*
- *Mid Tower Case w/230W Power Supply*
- *15" 1280x1024 Non-interlaced Flat Screen Monitor, .28 dpi*
- *101-key Keytronic Keyboard*
- *Microsoft Serial Mouse*
- *40W Stereo Speaker*
- *Free Mouse Pad*
- *Free America Online*
- *Free PFS: Windows Works*

$2895

With Purchase of New System only

M.S. DOS 6.2	***$45***
M.S. Windows 3.11	***$48***
M.S. Windows for Workgroups ADD on 3.11	***$58***

HD

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: *• 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.*

VISA MasterCard DISCOVER AMERICAN EXPRESS

intel inside
pentium™
PROCESSOR

PENTIUM™!... THE BEST VALUE!

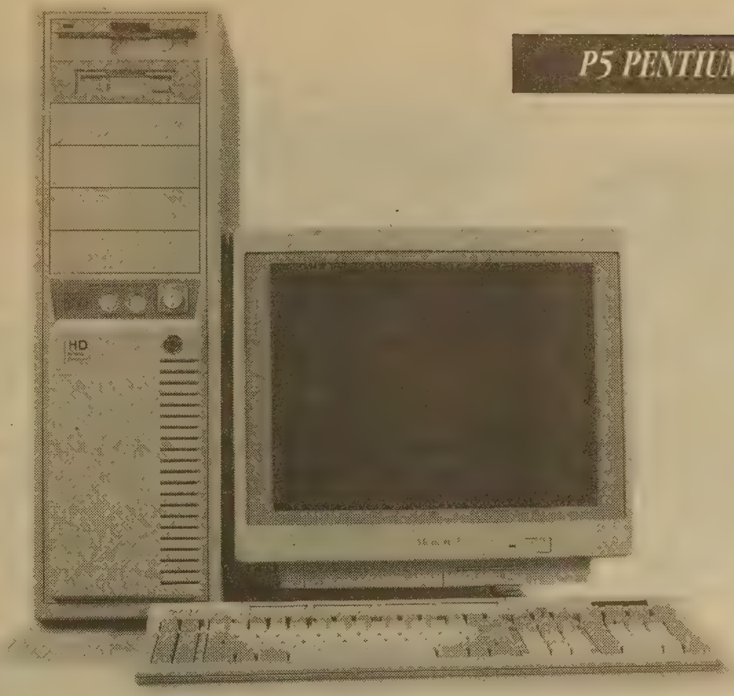
90MHz PENTIUM PCI System

- *Intel Pentium 90MHz Processor*
- *Intel Neptune Chipset*
- *256KB External Cache*
- *8MB 72-pin RAM (max. 128MB)*
- *2-16550 High Speed Serial Ports*
- *1 Parallel Port*
- *1.2MB FDD*
- *1.44MB FDD*
- *540MB SCSI HDD*
- *NCR PCI SCSI Controller*
- *Orchid Kelvin 64 PCI Video Card/2MB*
- *Mid Tower Case w/ 230W Power Supply*
- *15" Non-interlaced Monitor, .28 dpi*
- *101-key Keytronic Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*
- *Free PFS: Windows Works*

$2695

With Purchase of New System only

M.S. DOS 6.2	***$45***
M.S. Windows 3.11	***$48***
M.S. Windows for Workgroups ADD on 3.11	***$58***



P5 PENTIUM Processor PCI System

- *Intel Pentium Processor*
- *Intel Mercury Chipset*
- *16KB Internal Cache*
- *256KB External Cache*
- *8MB 72-pin RAM (Max 192MB)*
- *1.2MB FDD*
- *1.44MB FDD*
- *NCR PCI SCSI II Controller (Full SCSI II Compatibility)*
- *345MB SCSI HDD*
- *2-16550 UART High Speed Serial Ports*
- *1 Parallel Port*
- *Diamond Stealth 32 PCI/1MB*
- *Mid Tower Case w/230W Power Supply*
- *15" 1280x1024 Non-interlaced Flat Screen Monitor, .28 dpi*
- *101-key Keytronic Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*
- *Free PFS: Windows Works*

60MHz	***$2265***
66MHz	***$2395***

Green P5 PENTIUM Processor Local Bus System

- *Intel Pentium Processor*
- *16KB Internal Cache*
- *256KB External Cache (Max 512 KB)*
- *8MB 72-pin RAM (Max 128MB)*
- *1.2MB FDD, 1.44MB FDD*
- *32-bit VL-B IDE Disk Controller*
- ***424MB IDE HDD***
- *2-16550 UART High Speed Serial Port*
- *1 Parallel Port*
- *Tseng Lab ET-4000 W32i VL-B Video Card/2MB (Winmark 41M, 1280x1024x256 Colors)*
- *Mid Tower case w/230w power supply*
- *15" 1280x1024 Non-interlaced Flat Screen Monitor*
- *101-key Keytronic Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*
- *Free PFS: Windows Works*

60MHz	***$2220***
66MHz	***$2350***

- ***Made in U.S.A., design, support and service in U.S.A.***
- ***User-programmable power saving***
- ***3 Bus Master***
- ***64-Bit wide Data Bus***
- ***Flash Eprom Optional***
- ***OS: DOS, OS/2, Windows, Novell, Unix, Xenix and M.S.NT***

Featuring the world's fastest PC processor

intel inside
pentium™
PROCESSOR

Best Performance for all PC software.
Quality you can count on.
Available now.

The Intel Inside Logo and the Intel Pentium Logo is a registered trademarks of Intel Corporate. All products are trademarks of their respective companies.

Unleash the power of Pentium™ processor. Whether your computing needs involve large data files or memory intensive applications, you'll want to take advantage of the high-speed Pentium processor systems now available from HD Computer. With the new HD Pentium Processor systems, you no longer have to wait for your computer to catch up with the a demanding software application.

And, you don't have to give up power or performance with the new PCI bus system from HD Computer. Take advantage of the high performance PCI Bus architecture for your computing needs. Unparallel speed through your new system allows for increased data access and data back-up.

We can now run UNIX, NT, NEXTSTEP...

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: *• 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.*

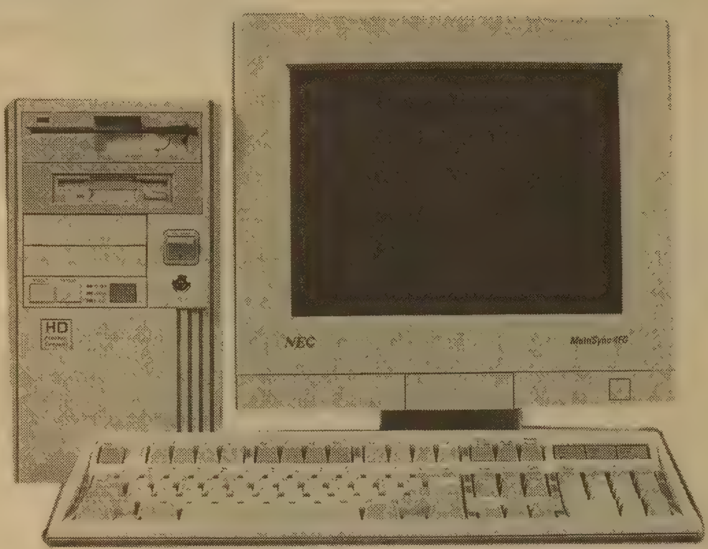
VISA MasterCard DISCOVER AMERICAN EXPRESS

486PCI/VESA LOCAL BUS

VESA Local Bus Best Buy

- *Intel 486 Processor*
- *128KB Cache*
- *4MB RAM*
- *1.2MB FDD*
- *1.44MB FDD*
- ***424MB IDE HDD***
- *2H/2F IDE Controller*
- *2S, 1P, 1G Ports*
- *32-bit VL-B Graphic Accelerator Card/1MB*
- *Mini Tower Case w/ 200W Power Supply*
- *14" Non-Interlaced Monitor, .28 dpi*
- *101-key Enhanced Keyboard*
- *3 Button Serial Mouse*
- *Free Mouse Pad*
- *Free PFS: Windows Works*

SX-33	***$1005***
DX-33	***$1155***
DX2-50	***$1185***
DX2-66	***$1255***



Intel 486 PCI Local Bus System

- *Intel DX-486 Processor*
- *ZIF Socket for Upgrade to Pentium OverDrive*
- *8KB Internal Cache*
- *256KB External Cache (max. 512KB)*
- *8MB 72-pin RAM (max. 128MB)*
- *Intel Saturn PCI Chipset*
- *Built-in NCR 32-bit PCI SCSI Controller*
- *2 Serial Ports*
- *1 Parallel Port*
- *1.44MB FDD*
- *345MB SCSI HDD*
- *Diamond Stealth 32 PCI/1MB*
- *Mid Tower Case w/ 230W Power Supply*
- *14" Non-interlaced Monitor, .28 dpi*
- *101-key Keytronic Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*
- *Free PFS: Windows Works*

DX-33	***$1595***
DX2-66	***$1695***

Green VESA Local Bus System

- *Energy-Efficient System*
- *Saves up to 70% on Energy Consumption*
- *VESA Standard Local Bus*
- *ZIF Socket OverDrive Ready*
- *128K Cache*
- *4MB RAM*
- *1.2MB FDD*
- *1.44MB FDD*
- *32-bit VL-B IDE Disk Controller*
- ***424MB IDE HDD***
- *2S, 1P, 1G Ports*
- *ET-4000 W32 VLB/1MB Video Card*
- *Mini Tower Case w/ 200W Green Power Supply*
- *14" Non-interlaced monitor, .28dpi*
- *101-key Enhanced Keyboard*
- *3 Button Serial Mouse*
- *Free Mouse Pad*
- *Free PFS: Windows Works*

SX-33	***$1115***
DX-33	***$1265***
DX2-50	***$1295***
DX2-66	***$1365***

intel inside

SCO

SCO Certified™

With Purchase of New System only

M.S. DOS 6.2	***$45***
M.S. Windows 3.11	***$48***
M.S. Windows for Workgroups ADD on 3.11	***$58***

The "GREEN" PC is taking the market by storm. A new initiative by the Environmental Protection Agency is gaining popularity with the introduction of energy-efficient computer products.

HD Computer offers one of the leading "GREEN" VESA local bus systems available today. Energy-savings add up to nearly 70% of the computer's normal power consumption. An energy-efficient computer system means time and money savings for you. When buying your next computer system, consider the HD computer energy-savings plan!

Take advantage of the high-performance of VESA Bus architecture. When you require a high-end accelerator for memory-intensive applications like CAD/CAM or large data file management, HD Computer offers a VESA local Bus system to fit your needs

We can now run UNIX, NT, NEXTSTEP...

HD

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: • *30 DAYS RETURN POLICY* • *1 YEAR PARTS WARRANTY* • *MAJOR CREDIT CARDS ACCEPTED* • *NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS* • *QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS* • *APO'S WELCOME* • *SHIPPING CHARGE NOT REFUNDABLE* • *RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL* • *PRICE DOES NOT INCLUDE SHIPPING* • *PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE* • *COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER* • *COMPONENTS COMPATIBILITY IS NOT GUARANTEED* • *NO RETURN ON USED ITEMS* • *ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE* • *NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY...* • *ALLOW 14 DAYS TO PROCESS REFUND.* • *NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.*

VISA MasterCard DISCOVER AMERICAN EXPRESS

MULTIMEDIA

10 CD-ROM Package Options for You to Convert Your Computer Into The Multimedia World!!

Free installation with Purchase of New System

- *NEC triple speed internal CD ROM*
- *Sound Blaster SCSI II*
- *Microsoft Works MPC*
- *Microsoft Bookshelf MPC*
- *Compton's Encyclopedia*

$595

- *Toshiba double speed internal CD ROM*
- *Sound Blaster SCSI II*
- *Microsoft Works MPC*
- *Microsoft Bookshelf MPC*
- *CD game*

$465

- *Panasonic double speed internal CD ROM*
- *Sound Blaster 16Bit Sound Card*
- *Microsoft Works MPC*
- *Microsoft Bookshelf MPC*
- *Toolworks Encyclopedia*
- *King's Quest*

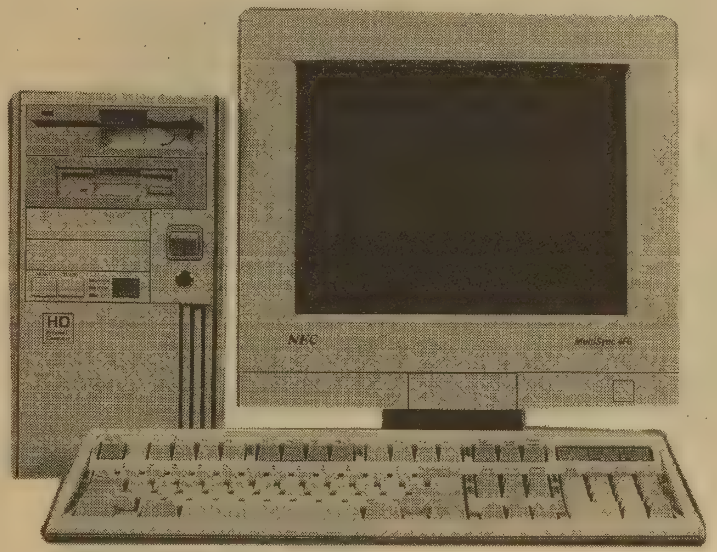
$329

- *Sony Double Speed CD-ROM*
- *16 Bit Mediavision Spectrum Sound Card*
- *Stereo Speaker*
- *New Grolier Encyclopedia*
- *Toolworks CD Deluxe Pack*

$319

- *Panasonic 523 Internal CD ROM*
- *Gallant 4000 sound card/Interface*
- *Speaker and Microphone*
- *U.S. Atlas*
- *Playing with Language English*
- *CD game package II*
- *Camera San Diego*

$295



Discovery CD
- *Entry Level Multimedia Upgrade Kit.*
- *Sound Blaster card, new dual speed drive Photo-CD compatible*
- *Lemmings, Animals!, Software Toolworks' Encyclopedia Sound Blaster CT-38 Shielded Stereo Speakers.*

$329

Creative Lab

Edutainment CD
- *Mid-Level Multimedia Upgrade Kit.*
- *Sound Blaster 16, new dual speed drive, Photo-CD compatible*
- *Sound Blaster CT-38 Shielded speakers, Microphone, Software Toolworks' Encyclopedia, Animals, Secret Weapons of the Luftwaffe, Monkey Island, Loom, Sherlock Holmes Vol. II, Carmen San Diego and Grandma and me.*

$389

Media Vision Family Kit

- *16Bit Digital Stereo Sound Card*
- *Double Speed Internal CD-ROM Drive*
- *320ms Access Time*
- *Photo CD Multi Session Ready*
- *Amplified Speakers*
- *Microphone*
- *9 Software Titles*

$389

Mitac

Mitac Deluxe Multimedia Kit
- *Mitsumi Double-Speed CD-ROM Drive*
- *16-Bit Sound card*
- *A Pair of Amplified Stereo Speakers with power boosters.*
- *Five CD ROM software titles*

$375

Media Vision Premium Kit

- *Double Speed SCSI II Portable CD-ROM*
- *Audio Disk Player*
- *16Bit Sound Card*
- *Microphone and Headphones*
- *Two Powered Speakers*
- *Protective Carring Case*
- *15 Software Titles*

$529

intel inside®

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: *• 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.*

VISA MasterCard DISCOVER AMERICAN EXPRESS

MULTIMEDIA

We Offer Variety of Choice Multimedia System for You to get into The Multimedia World!

CD-ROM Drives

NEC/New Triple Speed:
- *450Kb/Sec/190ms*

Interna CDR 510	***$359***
External CDR 510	***$449***
Interna 3XI	***$425***
External 3XE	***$475***

TOSHIBA/XM3401B
- *SCSI CD-ROM, 200ms, 330KB/sec*
- *Multi-Spin/Multi-Speed*
- *256K Cache Buffer*
- *Kodak Photo CD*
- *Caddy included*

Internal	***$289***
External	***$389***

PLEXTOR

3028 SCSI CD ROM 240ms	***$268***
DM-5028 External w/Caddy	***$368***

TEAC/CD-50 *SCSI CD ROM*	***$229***

PANASONIC/CR562 CD ROM
- *Includes Controller*
- *320ms/300KB/sec*
- *64K Cache*
- *Double Speed* ***$145***

SONY/New Multi Speed 300KB/Sec
- *Controller Card*
- *Cables and Software* ***$149***

Mitsumi Double Speed CD-ROM
$147

More Than 500 CD Titles are Available!!!

Sound Cards

Creative Labs

Sound Blaster Pro Deluxe	***$85***
Sound Blaster 16 Basic	***$99***
Sound Blaster 16 SCSI 2/with ASP	***$169/198***
Sound Blaster 16 MultiCD/with ASP	***$139/179***
Video Blaster	***$319***
Wave Blaster	***$179***

Gallant

MIDI Kit	***$39***
Gallant 4000 w/Interface, Speaker & Microphone	***$69***
Gallant 5000 16 Bit Stereo w/Interface, Speaker & Microphone	***$89***
Gallant 6000 16 Bit/ASP Speaker & Microphone	***$99***
Wave Table	***$89***

Logitech

Logitech SoundMan 16, 16-bit Sound Card	***$98***

Speakers

Gallant GSP 1000 80W Speaker	***$69***
Gallant GSP 330 40W Speaker	***$39***
SP-690 25W Speaker	***$35***
MLI-CP55 Speaker	***$12***

intel inside

Multimedia has definitely landed! If you're shopping for fully featured, high-performance Multimedia Systems... you've come to the right place. Capture new levels of creativity, exciting presentations, not to mention education, entertainment and video, at home or in the office.

The powerful, new Intel 486 PCI Multimedia system from HD Computer is available in four different configurations. HD's new Multimedia system offers the ultimate in performance and capability with an ability to expand. Upgradeable to Pentium Overdrive, this ready-to-go system comes packed with an impressive list of functions and features.

HD Computer brings Multimedia to your fingertips.

HD COMPUTER

Sales Hours: 9:00AM - 6:30PM Weekdays, 10AM - 6PM Saturdays (Pacific Time)

Sunnyvale
Tel: (408)720-0493/Fax: (408)720-1967
1196 Kern Ave., Sunnyvale, CA 94086

San Francisco
Tel: (415) 434-8118/Fax: (415) 434-8128
500Washington St., San Francisco, CA 94111

El Cerrito
Tel: (510)528-0753/Fax: (510) 528-0757
10005 San Pablo Ave., El Cerrito, CA 94530

Sacramento
Tel: (916) 483-4278/Fax: (916) 483-4826
2530 Watt Ave., Sacramento, CA 95821

Terms and Conditions: *• 30 days return policy • 1 year parts warranty • Major credit cards accepted • No surcharge for VISA, MC, AE and Discover Cards • Quality PO's accepted from Academic, Corporate and Public Institutions • APO's welcome • Shipping charge not refundable • Return shipments must be insured, prepaid and bear an RMA# on the shipping label • Price does not include shipping • Price are subject to change without notice • Component warranties offers and claims are handled by the manufacturer • Components Compatibility is not guaranteed • No return on used items • All open returns are subject to 15% restocking fee • No exchanges or refunds on cd's will be replaced with the same item only... • Allow 14 days to process refund. • Not Responsible for typographical errors.*

VISA MasterCard DISCOVER AMERICAN EXPRESS

NETWORK SYSTEMS

Design, Consultation, Installation, Trouble Shooting, Hardware & Software Configuration, Service & Support

HD Workstation

- *Desktop Case w/ 200W Power Supply*
- *Intel 486SX 25 Processor*
- *ISA/VESA Motherboard*
- *4MB RAM (Max 32MB)*
- *128K High Speed External Cache (Max 256K)*
- *TEAC 1.44MB Floppy Drive*
- *VESA Local Bus 32-bit Video Card/1MB*
- *14" Non-interlaced Monitor*
- *101 Enahnced Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*
- *NE-2000 Compatible Ethernet Card (Coax or 10Base-T)*

$845

Graphics, Engineering Workstation

- *Tower Case w/ 300W Power Supply*
- *Intel Pentium Processor*
- *PCI/VLB Pentium VLB Motherboard/512K Cache*
- *16MB Ram (Max 128MB)*
- *Teac 1.2MB and 1.44MB Floppy Drives*
- *1.0GB SCSI II Hard Disk*
- *Adaptec PCI SCSI II Controller Kit*
- *64-Bit VLB Windows Accelerator Card /2MB*
- *Toshiba Internal CD-ROM*
- *Viewsonic 20" Monitor*
- *Focus 9000 Keyboard*
- *Microsoft Serial Mouse*

$Call

PENTIUM/HD File Server

- *Tower Case w/ 300W Power Supply*
- *Intel Pentium 90MHz Processor*
- *PCI/VESA Motherboard*
- *16MB Ram 72PIN (Max 128MB)*
- *256K High Speed External Cache (Max 512KB)*
- *Teac 1.2MB Floppy Drive*
- *Teac 1.44MB Floppy Drive*
- *1.75GB SCSI II Hard Disk*
- *Adaptec 2842 VESA SCSI II Controller Kit*
- *Diamond Stealth 32 PCI Video Card/1MB*
- *14" non-interlaced monitor*
- *101 Enhanced Keyboard*
- *Microsoft Serial Mouse*
- *Free Mouse Pad*

$3555

Novell Labs Tested & Approved

SCO™

SCO Certified

intel® inside

It's your serve! New workstations from HD Computer will put you in the Winner's Circle. These little systems are loaded with features. Where else can you find complete network stations for under $1000?

With the extraordinary performance, HD Computer Systems allow you to race through heavy/intensive or demanding network environments. Accessing large amounts of data at high speed is the standard.

HD Computer offers unparalleled custom system configurations. When it comes to the best, the fastest and the most cost-effective, no one beats HD Computer network system solutions.

We can now run UNIX, NT, NEXTSTEP...

HD

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

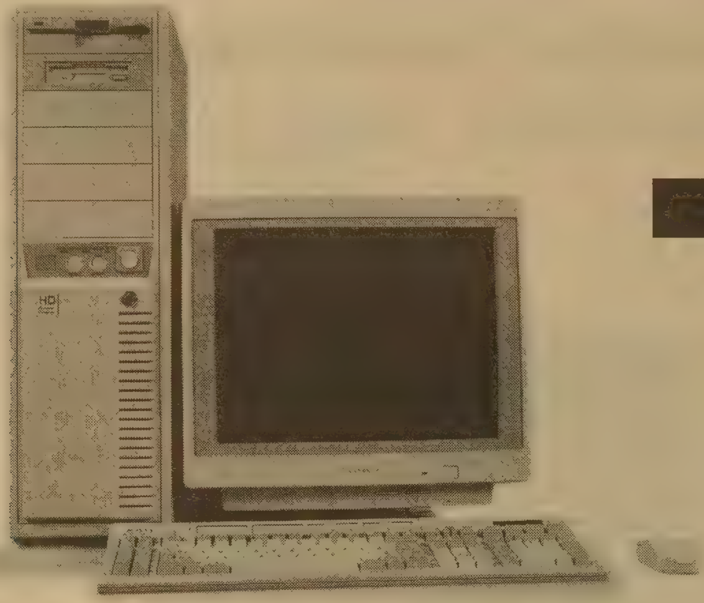
SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: *• 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.*

VISA MasterCard DISCOVER AMERICAN EXPRESS

NETWORK SYSTEMS

"We Stand Behind Our Technology, Quality and Service"



Ethernet Adapters

- *DANPEX*

EN-2000B 16Bit BNC	***$65***
EN-2000BT 16Bit Combo	***$85***
EN-2000PB 16Bit Soft Set BNC	***$60***
EN-2000PT 16Bit Soft Set 10BT	***$60***
EN-2000P3 16Bit Soft Set Combo	***$75***
EN-6000B Pocket Lan BNC	***$137***
EN-6000T Pocket Lan 10BT	***$140***
EN-400I 4Port 10BT Hub Card	***$150***
EN-800A 8Port 10BT Hub	***$215***
EN-1212A 12Port 10BT Hub	***$485***

- *Accesories*

RG58 Coax Cable BNC 10'	***$8.00***
RG58 Coax Cable BNC 25'	***$10.00***
RG58 Coax Cable BNC 50'	***$13.00***
RG58 Coax Cable BNC 100'	***$25.00***
BNC Straight Adapter F-F	***$1.80***
BNC T Adapter F-M-F	***$3.80***
BNC Terminator 50 OHM	***$2.20***
BNC Connector Crimp on RG58	***$1.80***
BNC Connector Mold	***$2.00***
Gender Change DB25 F/F, M/M	***$4.00***
Gender Change Cent .36 F/F, M/M	***$7.00***
Gender Change DB25 to Cent .36	***$5.00***
Gender Change DB9 to DB25	***$4.00***
Gender Change DB9 to Din6	***$5.00***
RG58 A/U Coax Cable 1000	***$125.00***
RJ45 8 Twist Pair Cable 1000'	***$110.00***
RJ45 8 Twist Pair Cable 10'	***$3.50***
RJ45 8 Twist Pair Cable 25'	***$4.50***
RJ45 8 Twist Pair Cable 50'	***$9.50***

Novell Labs Tested & Approved

SCO Certified

- *Microdyde/Novell*

NE-2000 Plus 16bit	***$115***
NE-2000T Plus	***$115***
NE-3200 EISA 32bit Coax/TP	***$539***
NE-2000 Plus 3	***$129***

Ethernet Adapters

- *Compatible*

NE-1000 8bit Coax	***$59***
NE-2000 16bit Coax/TP	***$60***
NE-2000 16bit Combo	***$75***
NE-2000 16bit 5 pack	***$235***
EP-888A Pocket Ethernet BNC + 10BT	***$145***
EP-808A 8Port Ethernet HUB	***$199***
EC-812 12Port Ethernet HUB	***$449***
EE-840 32Bit EISA Ethernet	***$289***

- *Intel*

Etherexpress 16 16bit 5pack/20pack	***$575/1995***
Intel 16bit Ethernet Combo PCLA 8100	***$129***
Intel 16bit Ethernet BNC PCLA 8110	***$115***
Intel 16bit Ethernet 10BT PCLA 8120	***$115***
Intel 16bit Ethernet Combo PCLA 8105/Flash	***$159***

- *3COM*

3C503 Etherlink II 16 Coax/TP	***$175***
3C503 Etherlink II 16 5pack	***$785***
3C507 Etherlink II 16 Coax/TP	***$295***
3C509 Etherlink III Coax/TP	***$145***
3C509 Etherlink III 5pack	***$645***

- *SMC*

Ether card plus elite 16 Coax/TP	***$119***
Elite ultra 16bit Coax/TP	***$115***
Elite ultra 16bit 6pack/24pack	***$675/2375***
SMC Ultra 16 Bit Ethernet Combo	***$135***

- *DLINK*

DE-600 TP Pocket Ethernet 10BT	***$199***
DE-205 TP 16Bit Ethernet 4 Port 10BT	***$290***

- *INFO Express Ethernet Adapter*

16Bit BNC/10TP	***$60***
32Bit VLB/Combo	***$139***

• *4 Port 10 Base-T Hub Card*	***$150***
• *8 Port 10 Base-T Hub*	***$215***
• *12 Port 10 Base-T Hub*	***$485***

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

We can now run UNIX, NT, NEXTSTEP...

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/Fax: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

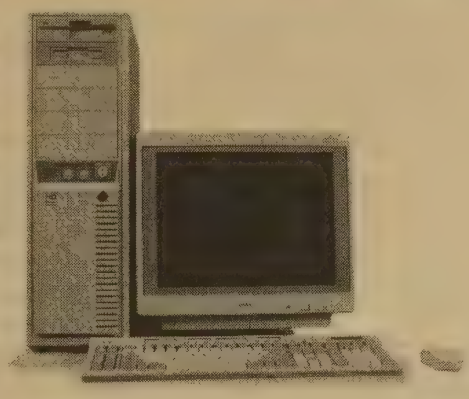
EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: *• 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.*

GENERAL/BEST BUY SYSTEM

Top Performance EISA/VESA System



- Intel DX-486 Processor
- ZIF Socket OverDrive Ready
- 8KB Internal Cache
- 256KB External Cache
- 4MB RAM (Max. 128MB)
- 1.2MB FDD
- 1.44MB FDD
- 32-bit EISA SCSI II Controller
- 2 16550 UART High Speed Serial Port
- 1 Parallel Port
- 345MB SCSI HDD
- Tseng Lab ET-4000 W32 VL-B GraphicAccelerator Card/1MB
- Mid Tower Case w/ 230W Power Supply
- 14" ViewSonic 6E Non-interlaced Monitor
- 101-key Keytronic Keyboard
- 3 Button Serial Mouse
- Free Mouse Pad
- Free PFS: Windows Works

DX-33	**$1845**
DX-50	**$1995**
DX2-66	**$1945**

With Purchase of New System only

M.S. DOS 6.2	**$45**
M.S. Windows 3.11	**$48**
M.S. Windows for Workgroups ADD on 3.11	**$58**

HD 486 System Below $1000

- Intel SX 486 Processor
- 128K Cache
- 4MB RAM (Max. 32MB)
- 1.44MB FDD
- 270MB IDE HDD
- 2H/2F IDE Disk Controller
- 2S, 1P, 1G Ports
- 16-bit SVGA Card/1MB
- Mini Tower Case w/ 200W Power Supply
- 14" SVGA Monitor, .39 dpi
- 101-key Enhanced Keyboard
- 3 Button Serial Mouse
- Free Mouse Pad

486SX-25	**$925**
486SX-33	**$945**

NOTEBOOK

Twinhead Powerful Slimnote

- Intel SL Enhanced Processor
- 4MB RAM Expandable to 20MB
- 1.44MB Built-in Floppy Disk Drive
- 84 Keys Keyboard
- PCMCIA Type II Slot
- Built-in Trackball
- 10" VGA/Mono Display
- MS DOS 6.2, MS Windows 3.1
- Physical Dimensions 8.5" x 11" x 1.6"
- Weight with Battery 5.8 lbs

486DX-33 w/200MB HD	**$1730**
486DX2-66 w/200MB HD	**$2150**

Twinhead 4 Pounds Powerful Subnote

- Intel SL Enhanced Processor
- 4MB RAM Expandable to 8MB
- 1.44MB External Floppy Disk Drive
- 8" Side lit VGA display, 64 shades
- 85MB IDE Hard Disk
- 79 Keys Keyboard
- 64 Gray Shades VGA Display
- PCMCIA Type II Slot
- Built-in Trackball
- MS DOS 6.2, MS Windows 3.1
- Physical Dimensions 7.1" x 10" x 1.6"
- Weight with Battery 4 lbs

486SL-33 Only **$1410**

MTC-4020 Color Notebook

- Intel 486SX-33 CPU
- 4MB RAM Expandable to 20MB
- 130MB IDE Hard Disk
- One Serial Port, One Keyboard/Mouse Port
- One External VGA Connector
- One PS II Keyboard/Mouse Connector
- 85 Keys Keyboard with Inverted " T" cursor Keys
- Build-in 1.44 MB Floppy Disk Drive
- Built-in 16mm Trackball
- Preloaded with Microsoft DOS and Windows
- 11" (W) x 8.5" (D) x 1.9" (H)/5.5lbs

$1815

Twinhead Brilliant Color Notebook

- Intel SL Enhanced Processor
- 4MB RAM Expandable to 20MB
- 1.44MB Built-in Floppy Disk Drive
- 84 Keys Keyboard
- 256 Color Display/512K RAM
- PCMCIA Type II Slot
- Built-in Trackball
- MS DOS 6.2, MS Windows 3.1
- Physical Dimensions 8.5" x 11" x 1.8"
- Weight with Battery 6.3 lbs

486DX-33 w/200MB HD Dual Scan Color	**$2395**
486DX-33 w/200MB HD Active Color	**$2950**
486DX2-66 w/200MB HD Active Color	**$3570**

HD Computer continues to offer leading, high-performance system configurations for any application. Custom configuration. Lifetime technical support. 30-day money back guarantee. No other Bay Area system integration house can boast this type of service and support.

HD's new EISA/VESA systems, 386 systems and Windows Accelerator systems are only a few of the many system configurations now offered by HD Computer. Whether for business or at home, HD will custom build the computer systems to your specifications.

We can now run UNIX, NT, NEXTSTEP...

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/FAX: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: • 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.

Quality From The Company You Know & Trust!

Motherboards

Intel Pentium (W/O CPU)

90 MHz PCI /ISA Neptune 256K	$495
66/60 MHz PCI /ISA Mercury 256K	$445

AMI (W/O CPU)

60 MHz EISA/PCI Excalibur 256K	$1575
60 MHz PCI/VLB Excalibur 256K	$1450
60 MHz PCI/ISA Excalibur 256K	$1450
486 EISA/VESA Enterprise III 256K 33/66MHz	$860/945
486 EISA/VESA Enterprise IV 256K 33/66MHz	$740/835
486 VLB/ISA Super Voyager 256K 33/66MHz	$575/695

Micronics (W/O CPU)

90 MHz PCI /ISA Neptune 256K	$645
66/60 MHz EISA/PCI M5PE 256K	$615
60 MHz PCI/ISA 3PCI Slots 256K	$485
486 EISA E2 256K	$395
486 EISA/VLB 256K	$495
486 JX30 VLB/ISA 256K	$285
486 VLB/ISA 256K	$235

Asus (W/O CPU)

90 MHz EISA/PCI Dual Processor	$945
60 MHz EISA/PCI 256K	$495
60 MHz PCI/ISA Mercury 256K	$425
486 PCI/ISA Saturn 256K	$315
486 VLB/ISA SIS Green 128K	$165
486 VLB/ISA Support DX4 256K	$195

Others (W/O CPU)

90 MHz PCI/VLB/ISA Opti 256K	$475
66/60 MHz PCI/VLB/ISA Opti 256K	$415
66/60 MHz VLB/ISA Opti 256K	$395
486 VLB/ISA Contaq 128K	$125
486 EISA/VESA SIS 256K	$295

Controllers

Adaptec

1522A ISA/SCSI Fast w/Kit	$145
1542CF ISA/SCSI Bus Master w/Kit	$239
1542CF+ ISA/SCSI w/Corel Kit	$312
2742T EISA/SCSI 14HDS w/Kit	$364
2842VL VLB/SCSI Fast w/Kit	$285
2940 PCI/SCSI w/Kit	$275
2940W PCI/SCSI Wide SCSI w/Kit	$315
PCMCIA SLIM SCSI	$289

AMI

EISA/SCSI Caching Controller	$389
VESA/SCSI Caching Controller	$393

Buslogic

BT 542B ISA/SCSI Bus Master w/Kit	$209
BT 545S ISA/SCSI Fast w/Kit	$218
BT 445S VLB/SCSI w/Kit	$274
BT 742KT EISA/SCSI w/Kit	$315
BT 747AK EISA/SCSI Fast	$364
KT 946C PCI/SCSI Support 8GB	$295

DTC

DTC 2278 VLB/IDE	$39
DTC 3280 ISA/SCSI	$139
DTC 3270 VLB/SCSI	$125
DTC 3290 EISA/SCSI Caching Controller	$499

Controllers

Future Domain

TMC 850 ISA/SCSI 8Bit	$59
TMC 1670 ISA/SCSI 16Bit	$149
TMC 1680 ISA/SCSI 7HD/4FD	$144

Q Logic

Fast ISA/SCSI Kit	$124
Fast VLB/SCSI Kit	$189
Fast EISA/SCSI Kit	$199
Fast PCI/SCSI Kit	$299

NCR

NCR PCI/SCSI 810 SCSI II	$125
NCR PCI/SCSI 810 Built-In Bios	$215
NCR PCI/SCSI 825 SCSI II SCSI III	$195

Trantor

8Bit ISA/SCSI	$49
EPP Mini SCSI	$209

Others

PCI/IDE IDE Enhanced	$42
DPT EISA/SCSI Fast w/Kit	$419
VLB/IDE w I/O	$45
ISA/IDE 16Bit w I/O	$25
Super IDE 16Bit w/16550	$59
High Speed Serial Port	$42
AT/IO 2 Serial 1 Parallel	$19

Video Cards

ATI

Graphics Ultra Pro Turbo 64 PCI/4MB	$589
Graphics Ultra Pro Turbo 64 PCI/VLB/2MB	$379
Graphics Ultra Pro PCI/2MB	$315
Graphics Ultra Pro VLB/2MB	$299
Graphics Ultra Pro EISA/2MB	$335
Graphics Ultra Pro ISA/2MB	$299
Graphics Ultra Plus 2MB	$215

Diamond

Stealth 64 PCI/VLB/4MB DRAM	$499
Stealth 64 PCI/VLB/2MB DRAM	$339
Stealth 32 PCI/VLB/2MB	$229
Stealth 32 PCI/VLB/1MB	$175
Stealth 24 VLB/ISA/1MB	$145
Stealth Pro VLB 2MB/1MB	$315/235
Stealth Pro ISA 2MB/1MB	$305/225
Viper PCI/2MB	$359
Viper VLB/2MB	$339

Orchid

Celsius VLB 2MB/1MB	$239/179
Fahrenheit 1280 Plus ISA/1MB	$139
Fahrenheit 1280 Plus VLB 2MB/1MB	$189/139
Kelvin 64 VLB/PCI/2MB	$235
Kelvin 64 VLB/PCI/1MB	$189

Video Cards

Matrox

MGA-ULT/2/A VLB/ISA/2MB	$449
MGA-IMP/31A VLB/ISA/3MB	$739
MGA-Pro/4-5/V VLB/4.5 MB	$1359
MGA-Pro/4-5 Z/V VLB/Z-Buffer	$1595
MGA-PCI/2 PCI/2MB	$399
MGA-PCI/2+ PCI/Upgradeable to 4MB	$435
2MB Memory for MGA-PCI/2+	$235

Number Nine

9GXe L-10 ISA/1MB	$255
9GXe L-11 VLB/ ISA/2MB	$345
9GXe L-12 VLB/ ISA/3MB	$425
9GXe L-14 ISA/4MB	$595
9GXe 64 PCI/VLB/1MB	$195
9GXe 64 PCI/VLB/2MB	$259
9GXe 64 Pro PCI/VLB/2MB	$359
9GXe 64 Pro PCI/VLB/4MB	$529

Hercules

HG 720 VLB/2MB	$359
HG 310 ISA/1MB	$249
HG 610 VLB/1MB	$249
S 501 VLB/1MB	$149
S 801 PCI/1MB	$149
D 601 VLB/1MB	$169
D 602 VLB/2MB	$229
D 702 VLB/2MB	$249
D 902 PCI/2MB	$249

Cardex

ET-4000 ISA/1MB/True Color	$95
ET-4000 W32 VLB/1MB/2MB	$125/185
CIRRUS LOGIC 5428VLB/1MB	$95
UMC/IDE VLB/1MB Built-In IDE/ID	$115
WD ISA WD Chipset /ISA	$95

Others

M.G.P. Card	$25
256K ISA/VGA	$35
1MB ISA/SVGA	$59
1MB DRAM Upgrade	$48
1MB VRAM Upgrade	$85

intel inside®

Novell Labs Tested & Approved

SCO™

SCO Certified

HD

HD COMPUTER

Sales Hours: 9:00AM - 6:30PM Weekdays, 10AM - 6PM Saturdays (Pacific Time)

We can now run UNIX, NT, NEXTSTEP...

Sunnyvale
Tel: (408)720-0493/Fax: (408)720-1967
1196 Kern Ave., Sunnyvale, CA 94086

San Francisco
Tel: (415) 434-8118/Fax: (415) 434-8128
500Washington St., San Francisco, CA 94111

El Cerrito
Tel: (510)528-0753/Fax: (510) 528-0757
10005 San Pablo Ave., El Cerrito, CA 94530

Sacramento
Tel: (916) 483-4278/Fax: (916) 483-4826
2530 Watt Ave., Sacramento, CA 95821

Terms and Conditions: • 30 days return policy • 1 year parts warranty • Major credit cards accepted • No surcharge for VISA, MC, AE and Discover Cards • Quality PO's accepted from Academic, Corporate and Public Institutions • APO's welcome • Shipping charge not refundable • Return shipments must be insured, prepaid and bear an RMA# on the shipping label • Price does not include shipping • Price are subject to change without notice • Component warranties offers and claims are handled by the manufacturer • Components Compatibility is not guaranteed • No return on used items • All open returns are subject to 15% restocking fee • No exchanges or refunds on cd's will be replaced with the same item only... • Allow 14 days to process refund. • Not Responsible for typographical errors.

VISA MasterCard American Express

Quality From The Company You Know & Trust!

Modems

Intel

Intel 14.4K	Fax Modem
INT/EXT	$119/149
Intel Satisfaxtion 400 INT	$269
Intel PCMCIA 14.4K INT	$415

U.S. Robotics

14.4K Fax Modem INT/EXT	$108/135
28.8K Modem 14.4K Fax INT?EXT	$199/235

Hayes

Accura 14.4K INT/EXT	$169/179
Accura 28.8K Fax 14.4K EXT	$279
Optima 14.4K EXT	$395
Optima 28.8K Fax 14.4K EXT	$445
PCMCIA Optima 14.4K	$295

Zoltrix

2400 Modem INT	$40
9600/2400 Fax Modem INT	$59
14.4K Fax Modem INT/EXT	$89/119

Hard Disk

Maxtor
Conner
Seagate
Western Digital
Quantum
Fujitsu
Micropolis

IDE
Enhance IDE
SCSI II
SCSI III
170MB - 9GB

Best Price in Town! Please Call!

Tape Drive

Colorado

DJ-10 120MB/INT	$99
DJ-20 250MB/INT	$159
Tracker 120MB EXT	$283
Tracker 250MB EXT	$323
FC-20 Controller	$79
Power Tape PT-25 2GB/INT	$965
Power Tape PT-50 4GB/INT	$1525

Conner

250MB INT Tape Drive	$156
2150S Viper 250MB INT/EXT	$329/449
2525S Viper 525MB INT/EXT	$459/569
2750 1.3GB INT/EXT	$799/899
2800 2.0GB INT/EXT	$999/1099

Summit

SE-120 120MB/INT	$129
SE-250 250MB/INT	$159

Wangdat

3100DAT 2.0GB INT/EXT	$999/1099
3200DAT 4-8GB INT/EXT	$1099/1199

Monitors

NEC

1431 14'NI 1024x768	$319
3V 15"NI 1024x768 .28	$468
3FGe 15"NI 1024x768 .28	$565
4FGe 15"NI 1024x768 .28 Flat	$614
5FGe 17"NI 1024x768 .28	$978
5FGp 17"NI 1280x1024 .28	$1075
6FGp 21"NI 1280x1024 .28	$1999

Sony

GPD-15SF 15"NI 1280x1024 .25	$489
GDM-17SE 17"NI 1600x1200 .25	$995
GDM-20SE 20"NI 1280x1024 .30	$1875

Nanao

F550i 17"NI 1280x1024 .28	$855
F550iw 17"NI 1280x1024 .28	$945
F560iw 17"NI Green Monitor	$1165
F560i 17"NI 1280x1024 .25	$1425
F660i 20"NI 1280x1024 .31 Trintron	$1995
F760iw 21"NI 1280x1024 .31	$1925
F780iw 21"NI 1600x1280 .26	$3115

Nokia

449E 15"NI 1280x1024 .28	$499
447B 17"NI 1280x1024 .25	$955
447X 17"NI 1600x1280 .25	$1099
445M 21"NI 1280x1024 .26	$1999
445X 21"Ni 1600x1280 .26	$2499

MAG

DX15F 15"NI 1280x1024 .28	$415
DX17F 17"NI 1280x1024 .26	$715
MX15F 15"NI 1280x1024 .28 Led, Flat	$475
MX17F 17"NI 1280x1024 .26 Led, Flat	$865
MX17FG 17"NI Green, Led, Flat	$895

ViewSonic

V-6E 14"NI 1024x768 .28	$265
V-15EX 15"NI 1024x768 .28	$395
V-17 17"NI 1600x1280 .27	$935
V-17G 17"NI 1280x1024 .28	$825
V-20 20"NI 1600x1280 .28	$1475
V-21 21"NI 1600x1280 .26	$1725

Impression

1439 14" 1024x768 .39	$215
1428 14" 1024x768 .28	$235
1428N 14"NI 1024x768 .28	$255
1528 15"NI 1280x1024 .28	$385
IMP-17 17"Ni 1280x1024 .26	$699

KFC

1511 15"NI 1280x1024 .28	$395
1507 15"NI 1280x1024 .28 Led	$415
1712 17"NI 1280x1024 .28	$740
1718 17"NI 1280x1024 .26 Led	$785

Hitachi

15S 15"NI 1280x1024 .28	$430
Elite 17 17"NI 1600x1200 .26	$975
20S 20"NI 1280x1024 .31	$1225

Monitors

Others

14" Mono Monitor	$95
14" VGA Mono Monitor	$119
14" Black NI Monitor	$265
15" Black NI Monitor	$395
14" 1280x1024 NI .28	$269

Printer

HP Deskjet 520	$295
HP Deskjet 560C	$569
HP Laserjet 4+	$1399
HP Laserjet 4P	$969
HP Laserjet 4L	$659
Memory upgrade for HP Printer	$48/MB

Panasonic

2123 24Pin	$239
2124 24Pin	$319
3624 24Pin	$399
4430 Laser 1MB	$669
4455 Laser 2MB	$1695

Okidata

400e/410 e	$497/687
Alps Lsx 1000 Laser	$1190

Mouse / Keyboard

M.S. Serial Mouse (OEM)	$34
M.S. Bus Mouse (OEM)	$59
Logitech First Mouse	$39
Logitech Serial Mouse	$55
Logitech Bus Mouse	$65
Logitech Trackball	$74
Z-Nix Cordless Mouse	$28
3-Button Serial Mouse	$9
101 Enhanced Keyboard	$29
Keytronic 101 Keyboard	$36
OMNI 101/102/Ultra	$98
Focus 9000 129 Key	$65
Focus 8000 111 Key	$55
Focus 2001 Click 101	$42

More Demo Items Available At Our Show Rooms!!

HD COMPUTER

SALES HOURS: 9:00AM - 6:30PM WEEKDAYS, 10AM - 6PM SATURDAYS (PACIFIC TIME)

We can now run UNIX, NT, NEXTSTEP...

SUNNYVALE
Tel: (408)720-0493/FAX: (408)720-1967
1196 KERN AVE., SUNNYVALE, CA 94086

SAN FRANCISCO
Tel: (415) 434-8118/FAX: (415) 434-8128
500WASHINGTON ST., SAN FRANCISCO, CA 94111

EL CERRITO
Tel: (510)528-0753/FAX: (510) 528-0757
10005 SAN PABLO AVE., EL CERRITO, CA 94530

SACRAMENTO
Tel: (916) 483-4278/FAX: (916) 483-4826
2530 WATT AVE., SACRAMENTO, CA 95821

TERMS AND CONDITIONS: • 30 DAYS RETURN POLICY • 1 YEAR PARTS WARRANTY • MAJOR CREDIT CARDS ACCEPTED • NO SURCHARGE FOR VISA, MC, AE AND DISCOVER CARDS • QUALITY PO'S ACCEPTED FROM ACADEMIC, CORPORATE AND PUBLIC INSTITUTIONS • APO'S WELCOME • SHIPPING CHARGE NOT REFUNDABLE • RETURN SHIPMENTS MUST BE INSURED, PREPAID AND BEAR AN RMA# ON THE SHIPPING LABEL • PRICE DOES NOT INCLUDE SHIPPING • PRICE ARE SUBJECT TO CHANGE WITHOUT NOTICE • COMPONENT WARRANTIES OFFERS AND CLAIMS ARE HANDLED BY THE MANUFACTURER • COMPONENTS COMPATIBILITY IS NOT GUARANTEED • NO RETURN ON USED ITEMS • ALL OPEN RETURNS ARE SUBJECT TO 15% RESTOCKING FEE • NO EXCHANGES OR REFUNDS ON CD'S WILL BE REPLACED WITH THE SAME ITEM ONLY... • ALLOW 14 DAYS TO PROCESS REFUND. • NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS.

BY JOHN WHARTON

The Legacy Of Gary Kildall

Gary Kildall, who died on July 11 in Monterey at the age of fifty-two, was often called a microcomputer-industry visionary.

I think that sells him short. A visionary generally speculates idly about the possible long-term ramifications of a technology, without doing anything to make the future happen. Gary was more of a pioneer, blazing a trail through the high-tech wilderness, marking the way for settlers of the new frontier. He was there every step of the way, conceiving the products, designing the algorithms, and debugging the code that would let the microcomputer industry reach its full potential.

And yet, outside of a small circle of friends, few people seem to know of or appreciate the scope of Gary's work.

I first met Gary in 1980 at a microcomputer workshop near Monterey. I last saw him at the same workshop this past April. Gary had helped organize this conference twenty years before; to this day, it's the oldest, best, and probably the least well known conference devoted to microcomputer technology and its effects on society. I think this meshed nicely with Gary's unassuming personality: Work softly and do good things.

Seeing The Potential

Even before Gary got involved with micros, his reputation had been established in the halls of Computer Science academia. While receiving his B.S., M.S., and Ph.D. degrees from the University of Washington, Gary invented a number of new compiler code optimization techniques that have since become standard industry practice. He was hired straight out of grad school as an assistant professor at the Naval Postgraduate School in Monterey, and was quickly granted tenure.

When I consider the hundreds of millions of ordinary people who benefit from Gary's ideas and inventions every day, I have to think most of his wishes have been met.

Gary may have been the first person to appreciate the microprocessor industry's potential. At a time when Intel was positioning microprocessors as a replacement for random logic in fixed-function desk calculators, postage scales, and traffic-light controllers, it was Gary who advised Intel that these same chips were flexible enough to be programmed as general-purpose computers.

At a time when microcomputer software developers were debating the merits of machine-language programming in octal vs. hex, Gary defined the first programming language and developed the first compiler specifically for microprocessors. PL/M is still widely used for developing dedicated microprocessor-based control applications.

Gary was also one of the first people to recognize that even the early, simple micros were powerful enough to support a complete minicomputer-style operating system, and proved it by creating an editor, assembler, linker, and loader, along with the first file system to use floppy disks as a general-purpose storage medium. (Until then, IBM had intended to use floppies just as a replacement for punched cards.) He offered this complete "control program and monitor" package to Intel for $20,000. Intel turned him down, and CP/M went on to become by far the highest volume OS of its time. Gary sold a quarter of a million copies at $75 each—at a time when other OSes typically cost from $5000 to $20,000 and up.

Then, as the individual, standalone "personal computer" paradigm was first starting to catch on, Gary saw that the true potential of PCs would lie in their connectivity, so he developed extensions to CP/M that let computers share files and peripheral devices over a network in a way that was fully transparent to both the user and the applications software.

SOLVING THE PUZZLE FOR YOU

NETWORK SOLUTIONS

- Complete Network Design and Implementation
- Installation of Custom Network Software
- Off-Site LAN Management
- Complete Technical Support

SERVICE & SUPPORT

On-Site Maintenance Services

Maintenance Contracts

Data Recovery

Changing Times
Changing Technology
Changing Needs

One Constant...
Binary Information Systems

UPGRADE

- 386 To 486 Processor
- Hard Drive And Memory Upgrades
- Leading Software Upgrades

COMPUTER SYSTEMS:

- High Performance Computer Systems
- Custom Configurations
- High Performance File Servers
- High Performance UNIX Work Stations

HEWLETT PACKARD, UNLEASHING THE POWER OF TODAY'S COMPUTING

HEWLETT PACKARD
Authorized Reseller

HP-HIGH PERFORMANCE SYSTEMS

Binary Information Systems is proud to present the complete line of high performance computers from Hewlett Packard.

- HP-VECTRA'S 486 based system
- HP-VECTRA'S Pentium based systems
- HP-High End Fileservers

Please call for your best price.

HP-LASER PRINTERS

LaserJet 4L Printer	$640
LaserJet 4P Printer	$939
LaserJet 4+ Printer	$1375
LaserJet 4SI Printer	Call
LaserJet 4SI/MX Printers	Call
LaserJet 4M/4M+ Printers	Call

PORTABLE COMPUTING

HIGH PERFORMANCE NOTEBOOKS FROM:

AST
ACER
ACOM
IBM
TWINHEAD
TOSHIBA
ZENITH
& MORE

Please call for pricing and availability.

BINARY'S DATA 4DX2/66

INTEL 486DX2-66

- 8MB RAM
- 420MB Hard Drive
- IBM
- 1Meg VLB VGA
- 14" SVGA NIMonitor
- 2 Bit IDE & Fast I/O
- 3 1/2 Floppy Drive
- Microsoft Mouse, DOS
- Windows
- 101 Keyboard
- Desktop Case

Complete System Only **$1474.00**

TEL: 415 882-9747 / FAX: 415 882-9749 MON-FRI 8:30AM-6PM
703 Market Street, Second Floor, San Francisco, California 94103

Prices reflect cash discount. Prices subject to change. Not responsible for typos.

BIN ARY

PRODUCT LINE

- 3 Com
- Adaptec, Inc.
- Aldus corporation
- AST Research
- ATI Technologies
- Autodesk Retail
- Berkeley Systems Design
- Borland
- Calcomp
- Castelle
- Cnet. Inc.
- Colorado
- Curtis
- Cyrix
- Daceassy Inc.
- David Systems
- DCA
- Diagsoft
- Digital Research
- Disney
- DPT
- Eagle Technology
- Hayes
- Hewlett Packard
- IBM
- Intel
- Intuit
- Irwin
- Kurta
- Leading Edge
- Logitech
- Lotus
- Megahertz
- Microsoft
- NCR Corp.
- NEC
- Novell
- Proxima
- QMS, Inc.
- Quantum
- Radius, Inc.
- Santa Cruz Operation
- Seiko
- Sharp
- Softklone
- Summagraphics
- Telebit
- Toshiba
- U.S. Robotics
- Xircom
- Zoom
- More. . .

MasterCard
VISA

BINARY INFORMATION SYSTEMS

Life At Digital Research

You had to be around back then to appreciate the true magnitude of the contributions made by Gary and his company, Digital Research Inc. (first called "Intergalactic Digital Research," now part of Novell). DRI introduced operating systems with windowing capability, preemptive multitasking, and menu-driven user interfaces years before Microsoft did Windows. Digital Research operating systems were the first to take advantage of the 386's extended memory space and built-in protection mechanisms—years before Microsoft or IBM attempted to do the same.

Gary fostered a work environment at DRI in which good, creative people could set about the task of revolutionizing the world, and enjoy themselves in the process. He and his people implemented the first diskette track buffering schemes, read-ahead algorithms, disk-file and file-directory caches, and RAM disk emulators ever for micros. But having fun counted, too. When the basement of one of the DRI buildings was gutted and a new cement subfloor was poured in preparation for a new VAX computer center, the whole gang held roller-skating parties downstairs every night after work.

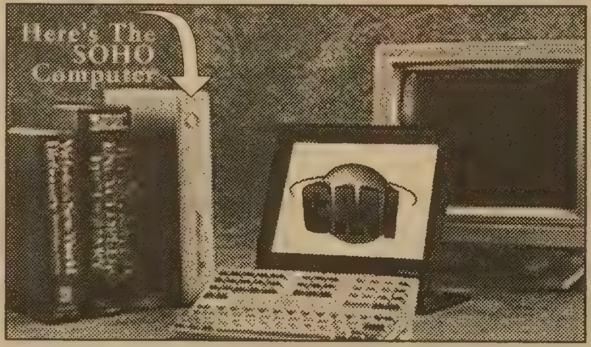
To receive international acclaim and obscene wealth for your work, first you have to want it. That wasn't Gary; that's not what spurred him on.

Back before the introduction of the IBM PC, Digital Research operating systems supported protocols for memory allocation, file sharing, process switching, interprocess communications, and peripheral management. When Microsoft bought the rights to QDOS (an unauthorized "quick and dirty" knockoff of CP/M) from a company called Seattle Computer Products, renamed it MS-DOS, and sold it to IBM for use with the PC, these protocols were removed. Not having worked with operating systems more advanced than 8-bit CP/M, Microsoft's chief OS programmers couldn't understand what these functions were for. To this day, Microsoft is scrambling to retrofit DOS and Windows with capabilities they unwittingly removed when they decided to "simplify" Gary's original design.

But perhaps Gary's most profound contribution to the computer industry was the creation of the first practical open-system architecture. All previous computer software had been targeted toward specific hardware environments. Gary isolated all the system-specific hardware interface code needed by CP/M within a small set of "basic I/O system" routines. As a result, the OS and all applications programs were fully machine independent. This one innovation caused the creation of the third-party software industry, since it expanded the potential market for each developer's

GREEN™

SOHO Series "SMALL OFFICE HOME OFFICE"
Small Foot Print Computer For Terminal, Mobile or Industry



Don't Be Surprised If You Have A Tough Time Finding Our Small Foot Print PC In Photo Above.

MODEL	TERMINAL	486SX-25	486SX-33	486DX-33
CPU	486SX-25	486SX-25	486SX-33	486DX-33
H. DISK	None	210 MB	420 MB	540 MB
PRICE	$549	$749	$849	$999

OPTIONS
1) B/W or Color LCD Monitor
2) Fax/Modem 14,400 bps
3) Carrying Case
4) Windows For Workgroups
5) DX2-66 Upgrade

Above Prices Include: 4MB RAM, 3 1/2" FDD, 1.44 MB, DOS 6.21 & Windows 3.1 (Except Terminal), Microsoft Mouse, Keyboard, 1 Year Parts/Labor Warranty

SPECIFICATIONS:
- 4 MB RAM Up To 20MB
- LCD and SVGA Monitor Ports For Simultaneous Display
- 3.5" HDD Up To 1 Gigabytes
- 2 Serial & 1 Bi-Directional Parallel Port For Scanner
- 1 Extra Expansion Slot for Fax/Modem, Network Or Sound Card Etc.
- Green PC, EPA Standards, FCC Class B
- Weight: Only 6 Lbs.
- Size: Only 11.5" x 8.5" x 2.1"

APPLICATIONS:
- Sales Presentation w/Overhead Projector Terminal
- Point Of Sales System
- Software Development-Multiple Platforms
- Industrial Uses
- Carry To/From Job Site
- Where Work Spaces are Limited
- Smart Terminal on any Network

Maxtor® 7546
What's Driving The New Computer.

BENEFITS:
- Space Saving-Hide It Right Next To or Underneath Your Monitor/Flat Panel
- Portability-Easy To Carry To & From Your Job Site-Only 6 Lbs & Smaller Than A Book
- Presentation Aid-CRT and Overhead Projector (or LCD) Can Be Simultaneously Supported.
- Best of Both Worlds-Portable Like A Notebook, Capable As A Desk Top
- Energy Efficient and Utility Cost Savings

Grand Micro International, Inc.
770 CHARCOT AVE. SAN JOSE, CA. 95131

(408) 526-1688
FAX: (408) 526-1689
Corporate, Gov't PO's Welcome
Prices Subject To Change w/o Notice
Dealer Inquires Welcome.

HOURS:
Mon-Fri
8:30-5:30

VISA

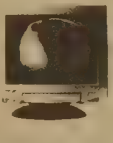
COMPUTER HARDWARE SUPER SOURCE

MONITORS

KFC

CT1428A	14" SVGA 1024x768 N/I 28dpi	$227
CT1511	15" 1280x1024 Flat Screen, .28dpi	$317
CT1507	15" 1280x1024 Green, Digital Ctrl	$375
CT1712	17" 1280x1024 Flat Screen, .28dpi	$648
CT1718	17" 1280x1024 Green, Digital Ctrl	$685

MAG INNOVISION



MX15F	15" 1280x1024, Flat Screen	$375
MX17FG	17" 1280x1024, .26dpi	$774
MX17F	17" 1280x1024, .26dpi	$675

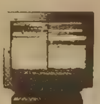
NANAO

340i w	15" non-int., flat screen	$627
F550i	17" non-int, 1280x1024, .28dpi	$878
F550i w	17" non-int, 1280x1024, .28dpi	$925
F560i w	17" AKA "The Green Monitor"	$1149
T560i	17" non-int, 1280x1024, .25dpi	$1414
T660i	20" Trinitron tube, 1280x1024, .28dpi	$1959
T760i	21" 1280x1024 @74Hz, .31dpi	$1819

Because is the way you want to go
NEC

JC1431	14" 1024x768 SVG	$314
3V	15" 1024x768 SVGA	$467
3FGe	15" 1024x768 @ 60Hz	$558
4FGe	15" 1024x768 @ 76Hz	$609
5FGe	17" 1024x768 @ 76Hz	$965
5FGp	17" w/ OptiClear Surface	$1098
6FGp	21" w/ OptiClear Surface	$1938

SONY



CPD 15SE	14" SVGA, .25dpi	$445
GDM-17SE1	17" SVGA, .25dpi	$945
GDM-20SE	20" State of the Art	$1797

ViewMagic

CA-1464E/SP	14" 1280x1024 N-I	$265
CA-1565CP/SP	15" 1280x1024 N-I	$352
CA-1565C/E	15" 1280x1024 N-I	$325
CA-1765CP/SP	17" 1280x1024 N-I	$659

ViewSonic®

ViewSonic 15	15" SVGA 1280x1024 .28dpi	$425
ViewSonic 17	17" SVGA, 1280x1024@ 76Hz	$878
ViewSonic 20	20" SVGA, 1600x1280, non-int.,	$1475

VIDEO CARDS

ATI TECHNOLOGIES INC

Graphics Wonder 1MB DRAM	$109
Graphics Ultra Pro 2MB VRAM	$239
Graphics Pro PCI 2MB VRAM	$call
Graphics Ultra Plus 2MB VRAM	$159
Graphics Pro Turbo PCI/VLB 2MB	$279
Graphics Pro Turbo PCI/VLB 4MB	$474

DIAMOND

Stealth 64 64Bit 2MB/4MB	$call
Viper Pro 4MB VRAM	$call
Viper 2MB VRAM PCI/VLB	$299/299
Stealth 64 VLB 2MB VRAM	$297
Viper SE 2MB VRAM PCI	$259

Genoa™

8500 VL Turbo 1MB VLB	$99
Phantom 32i 2MB VLB	$165
Phantom 32i 2MB PCI	$184

Hercules

HG610 Graphite VL Pro 1MB VLB	$215
HG720 Graphite VL Pro 2MB VLB	$364
PG310/PG420 Power 1MB/2MB	$239/359
PG610 Graphite Power 1MB VLB	$224
PG720 Graphite Power 2MB VLB	$298
Dynamite Power 1MB/2MB	$169/204
D702 Dynamite Power Pro 2MB VLB	$239
D902 Dynamite Power Pro 2MB PCI	$239
NEW!! Hercules Stingray 1MB VLB	$139

Number Nine

9GXe L-11 ISA/VLB 2MB VRAM	$329
9GXe L-12 ISA/VLB 3MB VRAM	$389
9GXe 64 PCI/VLB 1MB/2MB	$175/249

9GXi (all)..Please call for for updated Prices

ORCHID

Fahrenheit 1280 Plus 1MB/2MB	$call
Fahrenheit 1280 VA 1MB/2MB	$call
Celsius VLB 1MB/2MB	$120/178
Kelvin 64 PCI or VLB 1MB/2MB	$132/179
P9000 VLB 3MB VRAM	$call

SPiDER Graphics, Inc.

Spider 32 VLB 1MB/2MB	$92/129
Spider 32 Plus VLB 1MB/2MB	$105/155
Spider Black Widow 1MB/2MB	$134/191
Black Widow Plus 1MB/2MB	$174/232
Spider 256 CACHE 1MB/2MB	$134/182
Spider 64 VLB/PCI 2MB/4MB	$182/294

MEDIA VISION

Pro Graphics 1024 256 Color VLB	$215
Pro Graphics 1024 16.7Meg Color	$304
Pro Graphics 1280 VLB 4MB VRAM	$387

CD-ROM DRIVES

Panasonic Dual Speed CD-ROM	$138
Sony 33A Dual Speed CD-ROM	$138
Mitsumi Dual Speed CD-ROM	$137
Toshiba XM3401B SCSI-II CD-ROM	$287
NEC 3Xi SCSI CD-ROM Drive	$359
Orchid CDS-3110 Dual Speed	$139
Chinon CD-535 SCSI-II CD-ROM	$299

TAPE BACK-UP

Conner 250 w/ 1 tape cartridge	$149
Conner 250 External (via parallel port)	$329
Colorado DJ10 JUMBO120 120MB	$99
Colorado DJ20 JUMBO250 250MB	$169
Trakker 120 (parallel external backup)	$283
Trakker 250 (parallel external backup)	$323
Summit SE-120 120MB Backup	$129
Summit SE-250 250MB Backup	$159

SOUND CARDS

CREATIVE
CREATIVE LABS, INC.

Sound Blaster Value 8-Bit w/ Software	$59
Sound Blaster Value Pro Stereo	$79
Sound Blaster 16 Basic/Value Ed	$93/107
Sound Blaster 16 MCD/with ASP	$127/159
Sound Blaster 16 SCSI with ASP	$159/189
Wave Blaster	$call
EDUTAINMENT CD 16	$379

Sound Blaster 16, Stereo Speakers, Dual speed CD-ROM Drive, CD-ROM Software Bundle: Software Toolworks Multimedia Encyclopedia, Lucasfilm Games (3games) Simulations Sherlock Holmes Detective.

MEDIA VISION

Pro Audio 16 Basic	$79
Pro Audio Spectrum 16 /Studio 16	$94/125
Pro 16 Multimedia System II	$429

Pro Audio Studio, Dual speed CD-ROM drive w/ voice recognition, Karaoke, Compton International Encyclopedia, Mayo Clinic, Carmen Santiego, Civilization, Battle Chess, Mantis, Action.

Super Deluxe Multimedia Kit	$379

16-Bit Sound card, Dual speed CD-ROM Photo CD ready, Condensor Microphone, Amplified Speakers, 15 Software titles

TURTLE BEACH SYSTEMS

Multisound Multimedia Sound Card	$379
Monterey Multimedia Sound Card	$339
MAUI Wavetable Synthesizer Upgrd	$129

Maxtor

7131A 130MB IDE 14ms	$172
7171A 170MB IDE 14ms	$182
7245A 245MB IDE 15ms	$219
7345A 345MB IDE 14ms	$238
MXT-540A 540MB IDE 8.5ms 256K	$337
MXT-7546A 546MB IDE 12ms 256K	$317

CONNER

CFA210 210MB IDE 14ms	$177
CFA340A 340MB IDE 13ms	$212
CFS420A 420MB IDE >12ms	$227
CFA540A 540MB IDE >12ms	$317
CFA810A 810 MB IDE >12ms	$call

Quantum

ELS170A 170MB IDE 17ms	$177
LPS270A 270MB IDE 12ms	$209
LPS340A 340MB IDE 13ms	$224
LPS540AT 540MB IDE 12ms	$317
Lightning 730 730MB IDE 11ms	$call

Seagate

ST2343A 210MB IDE 16ms	$189
ST3283A 245MB IDE 12ms	$239
ST3290A 263MB IDE 16ms	$205
ST3391A 341MB IDE 13ms 256K	$265
ST3550A 452MB IDE 12ms 256K	$298
ST3600A 528MB IDE 10.5ms 256K	$call

FAX MODEMS

Etech 14.4 Internal Fax/Modem	$72
Intel 14.4 Internal Fax/Modem	$119
Intel 14.4 External Fax/Modem	$145
Intel 28.8 Internal Fax/Modem	$call
Intel 28.8 External Fax/Modem	$call
US Robotics Sportster 14.4 Internal	$114
US Robotic Sportster 14.4 Ext	$137
Supra Fax Modem 14.4i Internal	$85
Supra Fax Modem 14.4i External	$129
Supra Fax Modem 28.8i Internal	$247
Zoom Internal 14.4 Fax/Modem	$112
Zoltrix Internal 14.4 Fax/Modem	$89
Monterey Internal 14.4 Fax/Modem	$74

CASES W/ POWER SUPPLY

AT Desktop case w/ 230 Watts P. S.	$52
Mini Tower case w/ 230 Watts P. S.	$48
Medium Tower case w/ 230 Watts P. S.	$72
Full Tower case w/ 230Watts P. S.	$89
Super Full Tower Case w/ 2 side doors dual fans 300Watts Power Supply	$155

MOTHERBOARDS w/ CPU

intel.

INTEL Pentium P5-90 PCI & VLB	$1235
INTEL Pentium P5-66 PCI VLB	$call
INTEL Pentium P5-66 VLB 256KC	$call
INTEL Pentium P5-60 VLB 512KC	$call
INTEL 486DX4-100 VLB 256KC	$695
INTEL 486DX2-66 VLB 256KC	$375
INTEL 486DX2-66 PCI & VLB 256	$449
INTEL 486DX-50 VLB 256K	$365
INTEL 486DX2-50 VLB 256KC	$345
INTEL 486DX-33 VLB 256KC	$325

MOTHERBOARDS w/ CPU

Advanced Micro Devices

AMD 486DX2-66 VLB 256KC	$340
AMD 486DX2-50 VLB 256KC	$320
AMD 486DX-40 VLB 256KC	$295
IBM 486SLC3-75 VLB 128K Cache	$call
IBM 486SLC2-66 VLB 64K Cache	$call
486DLC-40 VLB 256K w/ Math	$188
CYRIX 486DLC-40 ISA 128KC	$139
AMD 386DX-40 128K Cache	$89
AMD 386SX-33 128K Cache	$65

Please Call for Products Not Listed.

PARAMOUNT Super System

PRO P90 SYSTEM

- * INTEL P5-99 VLB & PCI w/512K External Cache.
- * 16MB RAM 70ns.
- * 420MB IDE Hard Drive.
- * Teac 1.2Mb & 1.44Mb Floppy Drives.
- * VL Bus IDE Card w/ I.O. (2serial. 1Parallel., 1Game).
- * VL Bus Spider Black Widow Plus Video Card (32-Bit Graphics, 1600x1200, 16.7Meg Colors)
- * 15" Flat Screen SVGA Monitor .28dpi
- * Medium Tower Case with 230 Watts Power Supply
- * Microsoft Mouse
- * Keytronic 101 Enhanced Keyboard

$2695

PRO 486 SYSTEM

- * 486 VLB Motherboard w/256K External Cache.
- * 4MB RAM
- * 250MB IDE Hard Drive.
- * Teac 1.2Mb & 1.44Mb Floppy Drives.
- * VL Bus IDE Card w/ I.O. (2serial, 1Parallel., 1Game)
- * Vesa Local Bus Video Card w/ 1MB Ram.
- * 14" SVGA Monitor 1024x768 .28dpi Non-Interlaced
- * Mini Tower Case with 230 Watts Power Supply.
- * Logitech 2 Buttons Mouse
- * 101 Enhanced Keyboard

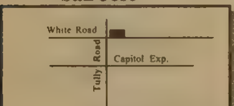
486DX-40	486DX2-50	486DX2-66
$1085	$1115	$1155

486 MULTIMEDIA SYSTEM

- * 486DLC-40 System w/ 128K External Cache Memory.
- * 4MB RAM.
- * Teac 1.2Mb & 1.44Mb Floppy Drives.
- * IDE Card w/ I.O. (2serial, 1Parallel., 1Game).
- * 250MB IDE Hard Drive.
- * SVGA Video Card w/ 1MB Ram.
- * 14" SVGA Monitor 1024x768 .28dpi Non-Interlaced.
- * Double Speed CD-ROM Drive (Photo CD Multi-session Ready, Data Transfer Rate:300Kb/Sec.).
- * Pro Audio Spectrum 16 Stereo Sound Card.
- * Labtec CS550 Amplified Speakers.
- * CD-ROM Software Package Includes: (Compton's Interactive Encyclopedia, Arthur's Teacher Trouble, Space Adventure, Greens, B17 Flying Fortress, Railroad Tycoon.).
- * Mini Tower Case with 230 Watts P. S.
- * Microsoft Compatible Mouse.
- * 101 Enhanced Keyboard.

$1229

San Jose



2670 White Rd. #155
San Jose, CA 95148
Hours: Mon-Fri 9-5PM

(408) 238-7804 fax (408) 532-0911

Great Services + Outstanding Prices = Customer Satisfaction

Paramount Computer
(510) 680-0204

PARAMOUNT COMPUTER

Energy ★ EPA POLLUTION PREVENTER

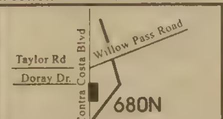
AMERICAN EXPRESS
MasterCard
VISA

MICROSOFT. WINDOWS. COMPATIBLE

Terms and Conditions

1. One year parts & 3 years labor on all complete system.
2. Not responsible for type errors.
3. Price and availability subject to change w/o notice.
4. Price reflects cash discount.
5. Sale prices are for end users purchase only.
6. All special-ordered items are non-refundable.
7. Shipping, Insurance and COD charges are extra and non-refundable

Pleasant Hill / Concord

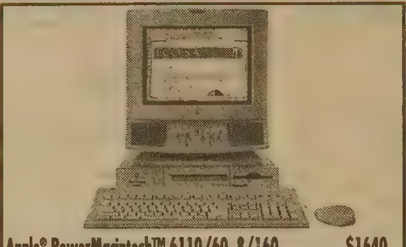


1630 Contra Costra Blvd. #D
Pleasant Hill, CA 94523
Hours: M-F 9:30-6 Sat: 11-4

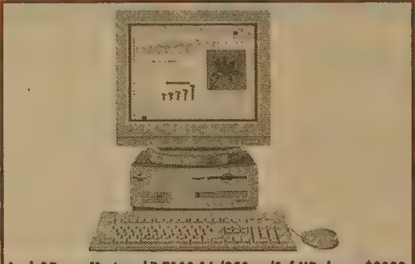
(510) 680-0204 fax (510) 680-1013

GREAT CUSTOMER SERVICE—WAREHOUSE PRICING

Authorized Dealer



Apple® PowerMacintosh™ 6110/60 8/160	$1640
Apple® PowerMacintosh™ 6110/60 8/250 w/CD	2060



Apple® PowerMacintosh™ 7100 16/250 w/SoftWindows..$3039

Apple® Power Macintosh™ 8100/80..."IN STOCK"

Quadra® 630 4/250	$1199
Quadra® 950 8/230	2500
Apple PowerBook Duo™ 230 4/80	CALL
Apple PowerBook Duo™ 250/270	CALL
Apple PowerBook Duo™ 270C 12/270	2400

"BlackBirds"

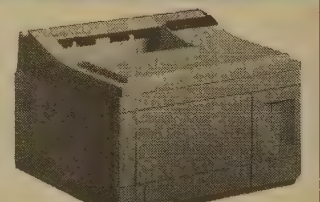
PowerBook™ 150	CALL
PowerBook™ 520 4/160	2100
PowerBook™ 520C 4/160	2685
PowerBook™ 540 4/240	2900
PowerBook™ 540C	CALL

"CALL FOR MEMORY UPGRADES"

New Apple® Monitors 15" & 17"	CALL
Apple® LaserWriter® Select 300	599
Apple® LaserWriter® Select 360	1425
Apple® Portable Stylewriter® II	365
Apple® Stylewriter® II	270
New Apple® Color Plus Monitor	299
Apple® 14" RGB Display & Tilt Swivel Base	375

Apple, the Apple logo, Macintosh, Stylewriter, LaserWriter, PowerBook and Macintosh Quadra are registered trademarks of Apple Computer, Inc. PowerBook Duo is a trademark of Apple Computers, Inc.

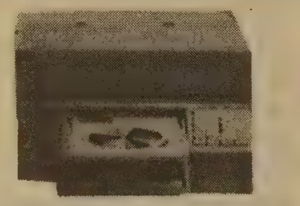
HEWLETT PACKARD



HP LaserJet 4 Plus Printer

The LaserJet 4+ has the industry's best 600dpi output, fast 12ppm print speed. With 2MB RAM, and excellent paper handling

$1389



HP DeskJet 1200C

- High quality resolution; 600x300 dpi text and 300 dpi color
- 35 Intelligent, 10 True Type
- 2MB, expandable to 26MB with SIMMs
- Print Speeds: 7ppm fast, 6ppm normal, 4 ppm HQ
- Color PCL5

$1420

WE CARRY ALL HP PRODUCTS!

HP DeskJet 310, Portable, 300dpi	$340
HP DeskWriter 310, Portable, 300dpi	295
HP DeskJet 520, 300dpi, 3 yr Warranty 3ppm,	279
HP DeskJet 500C, 300dpi, 13 Scalable Fonts, 3ppm	375
HP DeskJet 560C 600x300dpi, Colors Smart, 3 Year Warranty	549
HP DeskJet 1200C, 600x300dpi, Black, HP PCL 5, 2MB RAM	1420
HP DeskWriter, 300dpi, System 6.05 Compatible, 3 yr Warranty	279
HP DeskWriter C, 300dpi, 35 Scalable Typefaces, Built-in Spooler	375
HP ScanJet IIP, 300dpi, 8 Bit Grayscale, Live Preview	459
HP ScanJet IICX, Flatbed, 1200dpi, Enhanced Resolution, Color	915
HP 4+, 600dpi, 45 Scalable Fonts, 12ppm	1389
HP 4L, 300dpi, 4ppm	649
HP 4M, 600dpi, Postscript Level II, Appletalk	1899
HP 4P, 600dpi, Expandable, 4ppm	939
HP 4ML, Appletalk, 300dpi, 4ppm	975
HP 4MP, 600dpi, Mirofine toner, 4ppm	1319
HP 4SiMX, Expandable	CALL

We Carry All Hewlett Packard PC Products and Peripherals Including Vectras, Jet Direct Cards and Connectivity Products

IBM Authorized Dealer

THINKPAD NOTEBOOKS

IBM ThinkPad™ 755/755C

The 755C features passive or active matrix color, and a 3 year warranty. Plus the TrackPoint II - a little device that looks like a pencil eraser but acts like a mouse.

ThinkPad 755
486-33MHz 170MB
CALL

ThinkPad 755C
Passive or Active Matrix Color
CALL

IBM ThinkPad 360 & 360C

Packed with features and value offer you an affordable, lightweight notebook. All included is a full-size keyboard, long lasting battery life and PCMCIA compatiblity.

ThinkPad 360
486SL-25MHz,
4MB RAM, 125MB Hard Disk
$1875

ThinkPad 360C
256 Colors,
486/25 4MB RAM, 120MB Hard Disk
$3350

VALUE POINTS

PS/ValuePoint Minitower 486DX-33
4MB RAM, 1MB VRAM,
8 Slots, 6 Bays, No Drive
CALL

PS/ValuePoint SpaceSaver
486SX-33MHz, 4MB RAM,
Basic Keybd
$1125

PS/ValuePoint Desktop 486DX-33
4MB RAM, 120HD,
DOS, Windows, 5 Slots, 5 Bays
$1380

PS/Valuepoint SpaceSaver
486SL-25MHz, 4MB RAM,
Basic Keybd, Super Low Price
$775

COMPAQ

CONTURA'S

Contura Areo 4/25 Model 84	$950
Contura 4/25C Model 120	1950

MEMORY SALE!
FOR ALL COMPAQ PRODUCTS!

LTE'S

LTE Lite 4/25 M 120	$1995
LTE Lite 4/40C M 170	3075
LTE Lite 4/50DC M 340	4995
LTE Lite 4/75CX M 510	6200

PROLINIA'S

Prolinea Net 1/33 As low as	$1060
Prolinea 4/100 As low as	1800
Prolinea 4/50 Model 1	990

DESKPRO's

DeskPro XE 4/33s M 1	$1165
DeskPro XE 450 M 170	2050
DeskPro XE 4/66 M 270	2575

Call for Other Configurations!

SPECIALS!

APPLE

Quadra® 610 8/230, Ethernet, FP/wCD	$1650
Quadra® 950 8/230, 33MHz	2500
PowerBook Duo™ 270C 12/270 w/Fax/Modem	2400
PowerBook Duo™ Dock	425

COMPAQ

Deskpro 66M, Mod 510 8/510	2700
Prolinea Net 1 486/25 4/200 14" SVGA	995
Contura Aero 4/33C 4/170	2000
Qvision 200 20" SVGA Trinitron	1600
Pagemarq 15	1000

TAPE BACKUPS/STORAGE

DataPak 455.25 Removable	$250
PMO 650 5.25 Read Write Optical	2000
Mountain 4MB	1200

IBM

6384N53 486DX-33, 8/212	$900

NEC

SilentWriter 2,990 8ppm PostScript Laser	$900
UltraLite VERSA 486-33DX 4/250	1700
VERSA 50EC 486SL DX2-50 340MB	4000

TOSHIBA

4MB Memory Card PCMCIA	$175
8MB Memory Card PCMCIA	275
16MB Memory Card for T4400/T6400	800

MONITORS

SuperMac Color 20"	$1100
Summagrid IV 44x60 16 Button	700
RasterOps 20" Color	1250
RasterOps 19" Mono	400
RasterOps Pivot	500
Trion 17"SVGA	449
21" Flat Screen .28	1700
AST 14" SVGA Low Radiation	225
IBM 14V	375

COMPAQ
EPSON
NEC
OKIDATA
TOSHIBA
Authorized Dealer

ComputerLand of Hayward

Hours:
M-F 8:30-6
Sat 11-4

BUSINESS TO BUSINESS • • PERSON TO PERSON

22540 FOOTHILL BLVD. HAYWARD, CA 94541

Tel: 510/538-8080

Prices reflect cash discount

A St.
B St.
Foothill
880
N

Not responsible for typographical errors. Prices subject to change without notice.

The Legacy Of Gary Kildall *continued...*

programs by several orders of magnitude.

(Microsoft lifted the term "BIOS" for MS-DOS, but wrote the software to be machine-dependent anyway. Again, it wasn't until the concept of a "Hardware Abstraction Layer" was introduced for Windows NT in 1993 that Microsoft seemed to understand the philosophy behind Gary's original design.)

The list goes on. Gary developed an early computer-based arcade game and the first computer-controlled interface for video disks to allow automatic nonlinear playback—the precursor to today's interactive multimedia. When audio CDs were first introduced, Gary quickly recognized their potential as a high-capacity, low-cost distribution medium for software and digital data.

In fact, it was Gary who developed the file system and data structures needed for the world's first consumer CD-ROM, an electronic version of *Grolier's Encyclopedia*. He personally wrote the software that munged the original text database, built the cross-referenced index, and generated the final CD master. Gary also designed the user interface and wrote its hypertext-based data-retrieval engine—the first consumer software of its kind.

Ironically, many of the software techniques Gary pioneered more than a decade ago are just now being rediscovered. Apple and DEC are touting binary recompilation as a "new" technology for porting existing software to the PowerPC or Alpha architecture. Actually, DRI introduced an 8080-to-8086 binary recompiler in the early 1980s.

One of the more formidable challenges facing the personal computer and workstation industries today is the difficulty of supporting multiple CPU architectures in a heterogeneous environment. Yet way back in the early '80s one could sit down at a CP/M computer, insert a floppy disk, search its directory, edit and assemble a source file, and print out a listing, all without knowing (or caring!) whether the CPU inside the computer was a Zilog Z80; an Intel 8080, 8085, or 8086; or a Motorola 68000. If only today's systems were as simple and consistent to use!

Gary also did much to make computers accessible to the masses. Years ago he developed a commercial version of Logo because he thought children would be better off learning good software design methodologies from the start. Long before HyperCard, DRI software included a hypertext-based online help facility. And at a time when microcomputers appealed chiefly to a small cadre of hard-core technonerds, Gary was a host of *The Computer Chronicles*, a PBS television program that is still on the air.

The IBM PC, Or, "Gary Went Flying" Revisited

The *San Jose Mercury News* ran a page-one obituary after Gary's death that began with the observation: "but for a single failed business deal [Gary] might have enjoyed the wealth and fame of Bill Gates."

I disagree. To receive international acclaim and obscene wealth for your work, first you have to want it. That wasn't Gary; that's not what spurred him on. His early systems were developed not for their commercial value but so that he

LAPTOP & NOTEBOOK SUPER SOURCE
"The Only Portable Computer Specialists"

ARMNOTE TS30 UPGRADABLE MULTIMEDIA NOTEBOOK

NEW!

PC LAPTOP MAGAZINE BEST BUY!!

- 486SX/DX/DX2/DX4 Upgradable Intel CPU
- 4 MB RAM (Upgradable To 20 MB)
- 205 MB to 520 MB Upgradable Hard Drive
- Internal 3.5" 1.44 MB Floppy Drive
- Two PCMCIA Type II Slots or 1 PCMCIA Type I Slot
- Built-In Center Trackball
- Built-In Sound Card & Speakers
- Serial, Parallel, Keyboard, Mouse, Ext. SVGA, and Docking Station Ports
- VESA Local Bus Video w/Video Accelerator Card
- MS DOS 6.2 & Windows 3.1
- 1 Year Parts, 3 Years Labor Warranty

ARMNOTE TS30 w/205MB	SX-25	DX-33	DX2-50	DX2-66	DX4-75/100
MONO LCD, 9.5" SCREEN	$1549	CALL	$1749	CALL	CALL/CALL
DUAL SCAN COLOR, 10.5" SCREEN	CALL	$2149	CALL	$2399	$2699/CALL
ACTIVE MATRIX COLOR, 9.5" SCREEN	CALL	CALL	CALL	$3349	CALL/$3799

Twinhead Slimnote®

- PENTIUM P5/60 CPU
- 520 MB Hard Drive
- 8 MB RAM (upgradable to 64 MB)
- Active Matrix Color
- VESA Local Bus

$5149

- 486SX33 130MB/4MB/MONO........ $1675
- 486DX-33 210MB/4MB/DUAL SCAN........ $2450
- 486DX2-66 340MB/4MB/ACTIVE COLOR...... $4195

MRi NB8000

- 486SLC/33 MHz
- 125 MB Hard Drive
- 4 MB RAM
- Built-In Fax/Modem
- Spare Battery
- Built-In Trackball

$1099

ACCUNOTE 386

- 386SL/25 MHz
- 80 MB Hard Drive
- 2 MB RAM
- FREE Case

$799

IBM THINKPAD 300

- 386SL/25 MHz
- 125 MB Hard Drive
- 4 MB RAM
- 10" VGA Mono Screen

$899

IBM
ThinkPad 360/500/750/755
Monochrome & Color NoteBooks
CALL FOR PRICES

TOSHIBA
1910/1960/3400/4700/4800
Monochrome & Color Notebooks
CALL FOR PRICES

NOTEBOOKS FROM:
NEC, ZENITH, T.I., AST,
ACER & MORE
CALL FOR PRICES

PCMCIA 14.4 Fax/Modem Card $179

PCMCIA 9624 Fax/Modem Card $99

PCMCIA Networking Card $179

WE ALSO CARRY ALL NOTEBOOKS & LAPTOP MEMORY AND BATTERIES

ARM Computer Inc.
(408) 428-9800
FAX: (408) 428-9528
CALL ABOUT OUR LEASE-TO-OWN PROGRAMS
CORPORATE PO'S WELCOME
2149-A O'TOOLE AVE.
SAN JOSE, CA 95131
Hours: Mon-Fri: 8:30-6:30

We Fix SCSI Problems And Improve SCSI Performance

SCSIVue™ Active Diagnostic Terminator

- *Active Termination Increases Reliability*
- *Provides Regulated SCSI Voltage*
- *Automatically Adjusts As SCSI Changes*
- *Matches Cable Impedance Needs*
- *Gold Connectors Reduce Noise*
- *LEDs Diagnose SCSI Problems*

SCSIVue™ Gold Diagnostic Cables

- *Heavy Duty (military type) Cable Construction*
- *Provides Best Impedence Match*
- *Foil, Braid, Ferrite Shielding Reduces Noise*
- *Data Transfers Are Dramatically Improved*
- *LED Provides Diagnostic Ability*
- *Reduces SCSI Retries and SCSI Errors*

The quality of your SCSI Cables and Terminators has a direct effect on the performance and reliability of any SCSI bus. Using inexpensive "PASSIVE TYPE" Terminators and "UN-SHIELDED" Cables can cause many problems. Granite Digital has introduced the **SCSIVue** line of **Active Diagnostic Terminators** and **Gold Diagnostic Cables** to eliminate SCSI problems and to improve SCSI performance.

The **SCSIVue Active Diagnostic Terminator** is not only the best Active Terminator you can find, but also a SCSI analyzer. The **SCSIVue Gold Diagnostic Cables** are exclusively designed to provide the maximum protection available to the SCSI bus.

SCSI Vue Terminator

SCSI Vue Terminator	
Centronics 50	59
MicroD 50	79
MicroD 68	99
MicroD 68 Diff.	99

Granite D•I•G•I•T•A•L

SCSI Vue Gold Cables

SCSI Vue Gold Cables	
25 Apple / 50 Cent. 2'/6'	49 / 59
50 / 50 Centronics 18"/3'/6'	59 / 69 / 79
50 Cent. / 50 MicroD 3'/6'	89 / 109
50 / 50 MicroD 18"/3'/6'	79 / 89 / 109
68 / 68 MicroD 18"/3'/6'	129 / 139 / 159

Quantity & Dealer Discounts Available

SCSI 2

Phone 510-471-6442
Fax 510-471-6267
Granite Digital • 3101 Whipple Road • Union City, Ca. 94587

HIGHEST QUALITY MOTHERBOARDS DIRECT TO YOU!

	MB ONLY	MB + CPU
DUAL PENTIUM-90 4 PCI, 4 EISA, 256K	$890	$1560
PENTIUM-90 4 PCI, 5 EISA, 2 VLB, 256K	$580	$1256
PENTIUM-90 4 PCI, 5 ISA, 2 VLB, 256K	$356	$1025
PENTIUM-90 3 VLB, 256K	$316	$996
PENTIUM-60/66 4 PCI, 3 VLB, 5 ISA	$259	$658
PENTIUM-60/66 3 VLB, 256K	$206	$624
486DX4-100 4 PCI, 2 VLB, 4 ISA, 256K, ZIF	$179	$705
486DX4-100 3 VLB, 256K, ZIF	$116	$642
486DX2-66 3 VLB, 256K, ZIF	$98	$325
IBM 486BL3X-75 VLB, 256K W/IDE/ I/O	–	$288
IBM 486SLC2-66 VLB, 64K	–	$188
IBM 486SLC2-66 ISA, 64K	–	$178

CALL FOR CPU's · MEMORY · ADD-ON CARDS · HARD DRIVES · CASES · POWER SUPPLIES ·

PAULUS COMPUTER (408) 995-3452

Hours: Mon-Fri 9-6Fax: (408) 995-5446

12 South First St. #808, San Jose, CA 95113

· FREE VALIDATED PARKING · CORPORATE PO's WELCOME

Prices Subject To Change w/o Notice · Resellers Inquiries Welcome

The Legacy Of Gary Kildall *continued...*

wouldn't have to drive from Monterey to Silicon Valley to use a client's mainframe.

The same obituary also repeated the myth about how Gary supposedly blew his chance at a slice of the PC pie by skipping out of a meeting with IBM to go joy-flying instead. I'm sure Gary grew weary of constantly having to answer questions about that day. For the record, the myth just isn't true. Gary *did* meet with IBM that day, as scheduled, and they *did* agree to do business. And yet despite Gary's efforts to set the record straight, the story seemed to reappear every time an interviewer asked Gates about the origins of MS-DOS.

In fact, IBM licensed both MS-DOS *and* CP/M-86 for the PC. DOS carried a list price of $40 and was generally bundled free with every PC sold. CP/M-86, on the other hand, was offered only as a $240 added-cost option, and had to be specially ordered from the factory. Most buyers figured a brand new PC wasn't much good if you had to wait an indeterminate number of weeks for the operating system to arrive.

CP/M-86 for the PC didn't just languish and die; I think it was deliberately killed. IBM chose not to promote CP/M, I think, precisely because it was machine independent. IBM clearly saw a strategic advantage to establishing a custom OS that locked user software into its then-proprietary hardware platform.

Deep down, though, I don't think Gary ever really begrudged Bill Gates his business success or his personal fortune. Before the IBM deal, the two had worked together closely. If Gary was disappointed at the way things turned out, I suspect his frustration was directed towards IBM for deliberately misrepresenting their OS intentions, and toward the apparent willingness of the public and press to grant Bill Gates credit for "inventing" a major piece of software he neither designed nor understood.

No, Gary didn't much care about self-aggrandizement. He much preferred playing with his computers, racing cars, and other high-tech toys. He found it a much greater thrill to design a new program and watch it spring to life than to look for new ways to undercut and outmaneuver a competitor.

Gary was much more comfortable working in an environment where he could interview new job applicants while wearing a toga and roller skates than he was in negotiating licensing deals with a multinational corporation. Gary was more interested in giving away free software and documentation to a junior applications engineer he'd just met than in building his own satellite-based global communications network.

The Legacy

In the end, what I think Gary wanted most was to share his excitement and enthusiasm for computers and technology with others, and to get his ideas into the hands of as many people as possible.

There are 120 million PCs in the world today. All run disk-based operating systems and high-level compiled applications, and most depend on floppy disks for software distribution and data storage. Many have menu-driven windowing systems and support CD-ROM-based multimedia. A growing number are connected to local-area networks and allow preemptive multitasking.

Each of these systems owes a debt to Gary Kildall. Each of these capabilities originated in Gary's head. When I consider the hundreds of millions of ordinary people who benefit from Gary's ideas and inventions every day, I have to think most of his wishes have been met. ■

Copyright © 1994 by John Wharton. All rights reserved.

AVISION LABS INC.

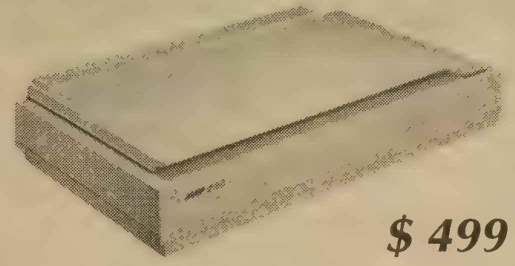
Headquarters:
48521 Warm Springs Blvd.,
Suite 312, Fremont, Ca 94539
Phone: 510-440-8785
Fax: 510-440-8337
Outside California: 1-800-440-8785
AVISION LABS INC.

East Coast Office:
Vantage International Inc.
133-43 41st Road
Flushing, NY 11355
Phone: 718-939-7309
Fax: 718-939-7310

Come See Us...
Seybold Show
Booth 2541
Sept 14-16
Moscone Center
San Francisco

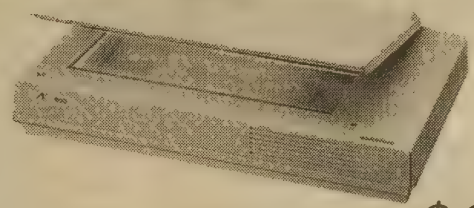
DEALERS / VARS ... CALL FOR SPECIAL PRICES !!!

MONTHLY SPECIAL #1
AV-660 color flatbed scanner (Epson ES600c compatible)
- IBM 3/4/586 compatibles, Macintosh, Sun workstations
- SCSI or PC interface
- 24 bit 16.7 million colors hi speed
- Maximum resolution 4800x4800 DPI
- Free color editing software
- Twain compatible



$ 499

MONTHLY SPECIAL #2
AV-680 color flatbed scanner (HP IICX compatible)
- IBM 3/4/586 compatibles, Macintosh, Sun workstations
- SCSI or PC interface
- 24 bit 16.7 million colors hi speed
- Maximum resolution 6400x6400 DPI
- Free Transparency Kit
- Free color editing software
- Twain compatible

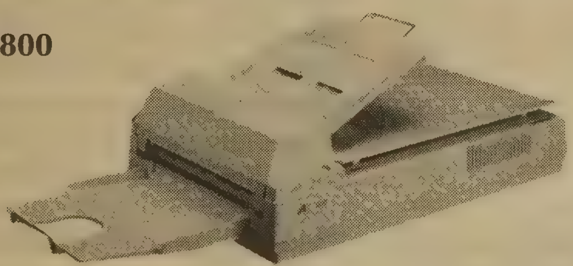


$ 999

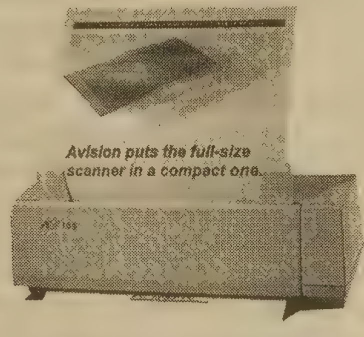
IMAGING MAGAZINE EDITORS' CHOICE

Scanners with built-in ADF for document imaging

AV-800



AV-100



Avision's Transparency Kit : A very light weight adapter that will allow you to scan 5"x7" X-rays, slides and transparencies.
Here's a part list of well-known software that have been adopted to our Avision scanners:

OCR
- OmniPage
- Text Bridge
- Word Scan
- Pressman
- Cuneiform

COLOR EDITING
- Photoshop
- ImagePals
- Dr. Halo

DOCUMENT IMAGING
- ImageFast
- FileMagic
- Scan&Type

OTHER APPLICATIONS
- Business Card Reader
- WinFax

Ten reasons to buy an AVision scanner
- Most competitive price you will ever find
- Easy to install and user friendly
- Local service available
- Quality assured manufacturer ISO 9001 certified
- Document imaging scanners with built-in ADF
- Small home office solution scanner, our AV-100
- Our patented Transparency Kit
- 16.7 million colors, high speed
- Bundled only with proven brand name software
- TWAIN compatible

TERMS AND CONDITIONS
1. One year parts and labor warranty.
2. Prices and availability subject to change w/o notice.
3. Shipping, insurance and COD charges are extra and non-refundable.
4. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
5. All returns subject to 15% restocking fee. No refunds after 30 days.
6. Defective items replaced or repaired at our discretion.
7. Superior reputation for service, quality and value products.
8. Not responsible for typo errors.

AVision
America's New Vision

Business Solutions

PENS & PALMTOPS • BY MITSU HADEISHI

PDA Playhouse, Checks On The Go, And More

In light of the rather dismal sales figures of the Apple Newton and the general downturn in enthusiasm for pen-based palmtops recently, it's interesting to come across a book which discusses the present and future of PDAs (personal digital assistants) with untrammeled enthusiasm and faith. PDA Playhouse, by Rod Williams and Harry Leverette (published by the Waite Group), was evidently written before it became clear that the Newton was going to have a relatively lackluster consumer introduction; the authors focus on what they see as the bright future of the PDA industry, with particular emphasis on the Apple Newton design which, in their view, will spawn it. What makes this book intriguing is the fact that it looks not at the state of the PDA today, but rather at fanciful notions of what PDAs might someday be.

Despite the rather broad title, the basic ideas of the book seem to be inspired somewhat narrowly by the peculiarities of the Apple Newton design. Nevertheless, the authors describe a number of applications which are currently not possible on any PDA; the book reads a little bit as though it were a speculative study for Apple engineers. These ideas are illustrated quite effectively by a simple multimedia presentation which comes on a disk bundled with the book. Scenarios are presented—an airline traveler who might use a PDA to quickly look up local hotels and get a map of the area; a shopper who links to the inventory system of a supermarket to get instant updates of the merchandise available and its location; or a waiter who uses a PDA to keep track of orders and to communicate instantly with the kitchen. In most of these scenarios, the existence of an inexpensive wireless network in conjunction with an infrastructure that supports easy and seamless PDA use is assumed—of course, these things do not exist at present. Again, this is the old chicken and egg problem: If the services don't exist, then why buy it, and if people don't buy it, then why make services available?

Like others before them, Williams and Leverette are clear-sighted enough to point out that the first generation of PDAs will be much like the Apple Macintosh 128—great proofs of concept, but far too limited to be of much practical use. They also make the correct observation that at first the primary market for the PDA will be in vertical markets (rather than the consumer market). Of course, the question is, will the critical mass of services and users ever be reached to create a mass consumer market, and if so, when?

> If the services don't exist, then why buy it? And if people don't buy it, then why make services available?

The Mac 128 was a great breakthrough in software design, even if the product itself was not of much use from a practical standpoint. The Newton is also a marginally useful product for a variety of reasons. The authors correctly point out that one of the chief advantages of a PDA, i.e., its communications ability, is not built into the Newton. This fault is corrected, of course, in the up-and-coming General Magic-based Motorola Envoy, which doesn't bother with handwriting recognition at all, but focuses on communications capabilities.

Though published this year, some parts of the book are a bit dated; for example, an entire chapter is devoted to the Dylan language, recently released by Apple, which was originally intended to be used as a development language for the Newton. However, it has been two years since Dylan has been linked to the Newton project in any serious way. At present, Dylan implementations exist only for desktop computer systems, and there are no plans to port the language to PDAs.

All in all, the book seems to be aimed more at the PDA designer than it is at the general public; since most of the things discussed in the book are speculative, there isn't really much reason for the average consumer to be interested in it. But as a stimulus for a designer who might be looking for a way to find or create a market for a PDA-based service or software package, the book provides some interesting ideas and observations. Perhaps the best market for this book is as inspiration for the small wireless or Newton developer trying to find a niche for their expertise in an era when mass-market acceptance of PDA technology has not yet appeared.

Panasonic KX-RC100

Most people find the task of balancing their checkbook time-consuming and tedious. A number of solutions exist for this problem; Quicken is, of course, one of the most popular software packages designed to keep track of personal finances. The downside of this solution is that it is usually not run on a portable platform; typically it is run on PCs and other desktop machines.

A number of palmtops, however, will run this software: the HP 100LX will, for example, and the new HP 200LX has it built-in (that's actually the primary difference between the 200LX and the 100LX). The Tandy Zoomer also has a version of Quicken built-in. But these and other palmtops do not do one thing that the Panasonic KX-RC100 does: they don't print your checks for you.

The Panasonic KX-RC100 does not run Quicken or anything like it; it is a very simple machine, dedicated primarily to keeping track of your checkbook finances. What it does have is a built-in dot matrix printer, just the

HIGHEST TECHNOLOGY LOWEST PRICE BEST SUPPORT

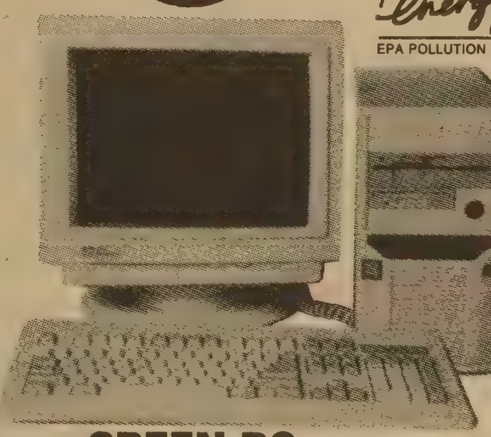
FASTER THAN FAST

486-66MHz VESA Machine

- INTEL 486DX-66MHz
- 4MB RAM
- 5.25" and 3.5" Floppies
- 345MB Hard Drive
- Local Bus VESA Turbo IDE Windows accelerator extra fast (5 Times Faster)
- Green PC Includes: Energy Star power supply, automatic monitor shut off & power down hard drive
- Windows Sound on PC Speaker
- 101 Keyboard & Mouse
- Special Software Bundle
- DOS 6.22, Windows 3.11, & Mouse
- On-Site Service
- Free Classes
- *Monitor not included*

$1199
w/ad exp. 9/20

intel inside



GREEN PC

Energy EPA POLLUTION PREVENTER

PENTIUM PCI 90MHz Machine

- INTEL Pentium PCI 90 MHz Machine
- PCI Controller
- 8MB RAM
- 5.25" & 3.5" Floppies
- 345MB Hard Drive
- Diamond Stealth 64 PCI w/2MB
- 101 Keyboard & Mouse
- Special Software Bundle
- On-Site Service
- Free Classes
- *Monitor not included*

$2599
w/ad exp. 9/20

Take Me Home Now!

Financing Available
90 Days Same as Cash

Canon

Bubble Jet 200e

Why buy the old Bubble Jet 200 from a chain store, when you can buy the 200e at Winners Circle for a lower price. Faster & Better!

$269.00
With Rebate

TEXAS INSTRUMENTS

MicroWriter PS 23

- 2MB RAM
- 5PPM Speed
- 300dpi quality
- Adobe Postscript
- PLC 4
- Parallel & Appletalk

$699

Top Rated MultiMedia Pentium Notebook

- PCMCIA Type II & III Slots
- 32-Bit VESA Local Bus
- Removable Hard Drive
- Color
- Full Sound

VIDEO TOASTER 4000

SUPER TOASTER ON DEMO & IN STOCK

Newtek Authorized

Create broadcast quality television on your desktop!

PSION Series 3A

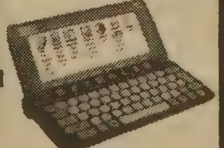
PalmtopPersonal Information Manager

- 512K Memory, upgradable
- Voice Active

Includes Software:DataBase-Day/Week/Month Calendar

- Word Processor-Spreadsheet
- Calculator-And much more

Prints and Connects to a host of desktop systems!



$495

PSION SERIES 3

Best Notebook-Byte Magazine

- 486SX-33 Upgradable to DX2-66
- 2 PCMCIA 2.0 Slots
- 32-Bit Local Bus
- 170MB Hard Drive expandable
- 4MB RAM exp. to 20MB

Docking Station Available for $599

$1600

FEATURING TOP RATED SERVICE

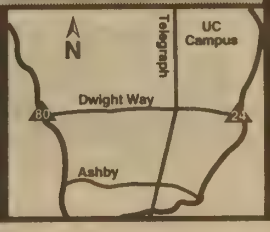
- Friendly, Knowledgeable Staff • Full Time Tech Support
- In-House Authorized Repairs • Free Public Domain Software • Free Training

PRODUCT SELECTION

- Top-Rated Major Brand Computers and Printers • CD-ROM • Tape Backup
- Laptop Computers • Modems and Fax Machines • Large Selection of Software & Accessories
- Color Desktop Publishing

WINNERS CIRCLE SYSTEMS

2618 Telegraph Ave. • Berkeley, California • 510-845-4814 • Fax 510-845-2400
Hours: Monday Thru Saturday 9-6 • Sunday 10-4



SALES, SERVICE & TRAINING

Novell Gold Authorized Reseller TM
Novell Authorized Service Center TM
Novell Authorized Education Center TM

EARN MORE MONEY!
Invest in your future with
NOVELL EDUCATION
Step #1
CNA
Package price $1,195
For the professional certificate that leads to the CNE

EARN MORE MONEY!
Join the prestigious ranks of CNE's
Step #2
CNE
Package price $2,995
Three options - Call for Information

EARN MORE MONEY!
Step #3
ECNE
Top Professional LAN Designation
Package price $2,995

Options:
#1: Advanced Trouble Shooting
(Serious LAN Guru Training)
#2: Connect The World
(For WAN Wizards to be)
#3: Internet Technology
(Net Surfing for Fun & Profit)

HOT DEAL
Netware 3.12 (25 Users) $1995
Netware 4.02 (100 Users) $4995
HOT DEAL

FOR INFORMATION PLEASE CALL
(510) 208-5700

MIS® SERVICES
"Networking the World"
TRAINING on 486/50's
Centrally Located at 12th Street/City Center BART Station
MIS Services, Inc. • 436 Fourteenth St., Suite 1030
Oakland, CA 94612 • (510) 208-5700

Palmtops...*continued*

right size to print on standard wallet-sized checks. You open up the machine, put the check inside, close it, enter the check information, and hit the "print" key; the check comes spitting out of the side, ready to be endorsed. At the same time, the information you entered into the machine is recorded in the KX-RC100's memory.

You can store up to twenty-five payee names for quick recall, and you can manage two checking accounts. The unit will store up to one thousand check entries. You can also handle up to ten credit cards and account numbers, and keep track of up to six hundred entries there. Unfortunately you cannot really use this machine to replace your pocket organizer, because it only stores up to fifty telephone numbers. The battery pack is a rechargeable NiCd pack combined with a five-year lithium battery backup.

Measuring 1.25" x 7.25" x 3.25", it's certainly small enough to fit into a pocket; it's about the same overall size and shape as an HP 100LX. It's a bit hefty at .85lbs., but that's to be expected since it contains a built-in printer. The display is two lines by 19 characters across; not a very large display, but enough for its simple functions. An interface kit is available to transfer data to a PC-compatible; no mention was made of a Mac connectivity kit. Other functions include a date and time indicator and a calculator.

A package costing more is not necessarily worth more to you if its complexity is so burdensome that it hinders more than helps.

I tried using the machine to print out some checks; it was quite straightforward, but took a full twenty seconds (after inserting the check into the machine, which took at least five or ten seconds); it didn't seem in any way faster than writing out the check by hand; perhaps slightly slower. The only advantage was that the information was being stored electronically at the same time. Because of this, I don't see that this machine really saves you very much time over, let's say, a pocket Quicken-based palmtop.

However, it is cheaper than the average Quicken-capable palmtop; it costs around $350 street. Unfortunately, though, because it is really not a replacement for your pocket organizer (due to its limited capacity), it would really only be appropriate for those people who either didn't want or need portable organizer functions, or those who are willing to have two separate palmtops (I doubt there are many of these folks around).

WinPad Delayed Further

As reported in an earlier column, the Microsoft WinPad standard, which had originally been expected to be integral to a series of Intel-based PDAs, has been set back; it's becoming more clear that this setback is going to be extensive. The Polar chipset, a 386-based design which was going to be the basis of a new series of PDAs this year, is more likely going to be used in lower-powered palmtop organizers instead. A 486-based PDA chipset may find its way into machines by this time next year, however.

171MB PCMCIA Drive

MiniStor Peripherals Corporation has announced the highest capacity PCMCIA drive ever produced; a 171MB Type III (10.5mm height) PCMCIA drive with Stac Electronics Stacker Anywhere data compression, giving it an effective capacity of 340MB when compression is enabled. The drive will retail for $599, and is expected to ship third quarter this year.

Other MiniStor Type III drives include a 260MB compressed-capacity drive for $499, and a 170MB compressed-capacity drive for $299. These drives are designed to withstand operating shocks of up to 200Gs and non-operating shocks of up to 900Gs. The new drive comes with a PocketSocket case for transportation, which gives it protection against shocks up to 1200Gs. MiniStor also sells the DockIt Socket, a PCMCIA slot and docking station for IBM AT-bus machines.

1-800-REAL-PCs*?

Yes, we did choose a clever phone number,

but its just to make the point that our PCs are the real PC compatibles and are unlike the proprietory architectures of the Apples, and most of the Compaqs and the IBMs etc. Even a casual look at their designs will make it clear to you why just an upgrade for a lot of these systems could cost almost as much as buying a new PC from us. And not just that, when you consider the thousands of very inexpensive softwares and peripherals available for our PCs you would appreciate what we mean by **REAL-PCs.**

That's not all, what you may actually like the best is the service committment offerred with our COSMOS series of PCs...
one year on-site (in Bay Area) and
three years parts and labor (ex-factory) warranty.

ASAs COSMOS Series of DeskTop PCs

IMPACT A

Intel 486DX4-100 MHz CPU
VLB/ISA DeskTop System
8MB RAM, 256K Cache
VLB IDE Cont
2 Serial 16550, 1 Bi-Dir Parallel
Ethernet Coax/10BT/AUI Ports
1.44MB Floppy Disk Drive
540MB 11ms IDE Hard Drive
ATI UltraGraphics VLB 2MB VRAM
14" .28 1024x768 NI Monitor
MaxiSwitch KeyBoard, MS Ser Mouse
MS DOS 6.22, MS Windows 3.1 and
MS Office Pro for Win 4.3 (loaded)

$2,627

IMPACT B

Intel Pentium 60 MHz CPU
PCI/ISA/VLB DeskTop System
8MB RAM, 512K Cache
PCI IDE Cont
2 Serial 16550, 1 Bi-Dir Parallel
Ethernet Coax/10BT/AUI Ports
1.44MB Floppy Disk Drive
540MB 11ms SCSI-II Hard Drive
ATI UltraGraphics PCI 2MB VRAM
15" .28 1280x1024 NI Monitor
MaxiSwitch KeyBoard, MS Ser Mouse
MS DOS 6.22, MS Windows 3.1 and
MS Office Pro for Win 4.3 (loaded)

$2,847

IMPACT C

Intel Pentium 90 MHz CPU
PCI/ISA/VLB DeskTop System
16MB RAM, 512K Cache
Adaptec 2940 PCI SCSI-II Cont
2 Serial 16550, 1 Bi-Dir Parallel
Ethernet Coax/10BT/AUI Ports
1.44MB Floppy Disk Drive
1 GB 9.5ms SCSI-II Hard Drive
ATI UltraGraphics PCI 2MB VRAM
15" .28 1280x1024 NI Monitor
MaxiSwitch KeyBoard, MS Ser Mouse
MS DOS 6.22, MS Windows 3.1 and
MS Office Pro for Win 4.3 (loaded)

$3,752

IMPACT D

Intel Pentium 90 MHz CPU
(Dual Pentium Processor Capable)
PCI/EISA/VLB DeskTop System
32MB RAM, 512K Cache
Adaptec 2940 PCI SCSI-II Cont
2 Serial 16550, 1 Bi-Dir Parallel
Ethernet Coax/10BT/AUI Ports
1.44MB Floppy Disk Drive
1 GB 9.5ms SCSI-II Hard Drive
ATI UltraGraphics PCI 2MB VRAM
17" .26 1280x1024 NI Monitor
MaxiPro 124 KeyBoard, MS Ser Mouse
MS DOS 6.22, MS Windows 3.1 and
MS Office Pro for Win 4.3 (loaded)

$5,807

ASA-RaidTec Disk Arrays

Backed by a national service contract

Call department SDA at (408) 496-6853 Ext. 208

ASA ThouroughBred Servers

Backed by ASAs three year service commitment

Call department SDA at (408) 496-6853 Ext. 208

ASA
COMPUTERS, INC

NATIONAL: (800) REAL - PCs
SILICON VALLEY: (408) PCs - FOR - U
* (Please note, in Silicon Valley only the 408 number is valid)

intel inside

AT&T

UNIX®/Open Systems Networking & Communications

UNIX®/Open Systems education for software developers, Administrators & users
Networking & Communication education for data managers, research/developers, and network users

AT&T Technical Education Center

Learn from a company that uses the most advanced technology to run its business - with training available in the San Francisco area at 4440 Rosewood Dr. in Pleasanton, CA.

Course	Date	Days	Tuition
Internetworking	9/6	2	$725
C++ for Non-C Programmers	9/12	5	1625
Multimedia Communications: Technologies Systems and Service	9/12	2	725
Introduction to INFORMIX-SQL	9/19	2	650
Advanced INFORMIX-SQL	9/21	2.5	995
Shell Command for Users	9/26	4	1200
Network Management	10/6	2	725
Programming in C Language	10/10	5	1625
Understanding Satellite Communication	10/11	2	730
Understanding Fiber/Optics	10/13	2	875
C Lang. structures, pointers	10/17	3	995
Understanding Global Communications	10/18	1	365
Understanding AT&T Network Services	10/19	2	845

To Enroll or for Further Information Call

1-800-TRAINER, Prompt 1, ext. 6564
1-800-872-4637

UNIX is a registered trademark of UNIX Systems Laboratories, Inc.
INFORMIX is a registered trademark of INFORMIX Software, Inc.

TOSHIBA

WHOLESALE PRICES TO THE PUBLIC
BUY OUT-OF-STATE & $AVE

T1910/200
•486/33L
•4MB 200HD
NEW MODEL
$1445

T1910 CS/200
•COLOR
•MOUSE & WINDOWS
$1965

T1960 CT/200
•ACTIVE COLOR
•MOUSE & WINDOWS
NEW MODEL
$2885

T3600 CT/250
•8 MB RAM
•ACTIVE COLOR
NEW MODEL
$3945

TOSHIBA FACTORY RECONDITIONED*

MONO		COLOR	
T1900/120	$1050	T1910CS/200	$1650
T1910/120	$1150	T1950CS/120	$1650
T1950/120	$1250	T4400CT/120	$1750
T4500/120	$1100	T4400CT/200	$1850
T4600/200	$1600	T4500CT/120	$1695

*All prices listed are cash discounted. *Not responsible for typographical errors. *Prices subject to change without notice.

S SEABROOK COMPUTERS
SALES (713) 333-2728
M-F 9:00-6:00 CST
ACCESSORIES/VOICE MAIL (713) 333-0182
18203 EGRET BAY BLVD. HOUSTON, TX 77058

Palmtops...*continued*

Cardwell Line Of PCMCIA Products

Cardwell International Corporation has announced a series of PCMCIA cards and related products. The CardBay-AT Card Drive supports up to four PCMCIA sockets in a variety of combinations; the bay supports type I, II, or III PCMCIA sockets, and will mount into any 3.5" or 5.25" drive bay. The product also features a speaker for fax/modem cards and includes the CardMaster plug-and-play compatibility support for Cardwell cards. Using the CardMaster software, "hot swapping" of Cardwell PCMCIA cards is automatically supported. Pricing for the bays ranges from $149 to $209. Cardwell also makes a Type I form factor Ethernet card for $229, including support for Banyan Vines, Microsoft LAN Manager, Novell Netware, Netware Lite, and Workgroups for Windows. The card has a data transfer rate of 10Mbps and a 64K on-board buffer, and can be used with either 10BaseT or 10Base2 connectors.

RESOURCES:

PDA Playhouse
Rod Williams and Harry Leverette
Published by The Waite Group
Corte Madera, CA

Ministor 340MB 1.8" PCMCIA drive
MiniStor Peripherals Corp.
2801 Orchard Pkwy.
San Jose, CA 95134
1-800-943-0165,
fax (408)434-0784

Cardwell PCMCIA Products
Cardwell International Corp.
110 Blue Ravine Rd., Ste. 156
Folsom, CA 95630-4712
(916)985-1880

Rancho Technology PCMCIA SCSI card
Rancho Technology, Inc.
10783 Bell Ct.
Rancho Cucamonga, CA 91730
(909)987-3966,
fax (909)989-2365

ST288VFC V.FAST PCMCIA fax/modem
SMART Modular Technologies
25531 Northport Loop West, Bldg. 3B
Fremont, CA 94538
(510)623-1231

Cardwell also offers two Type II fax modem cards: a $169 9600 baud fax/2400 baud data modem and a $339 14.4kbps data/fax modem card. In addition, they have a family of PCMCIA flash memory cards with capacities ranging from 512K to 16MB, which feature a 100,000 write/erase cycle endurance capability. These cards range in price from $139 to $309. Their $249 SCSI card will run at 500K/second sustained data rate and a 1.2MB/sec burst rate. The card includes a 32K SRAM buffer for DMA emulation and will support hot insertion and removal in conjunction with Cardwell's CardMaster software. The card supports the ASPI standard and optional Corel SCSI software is available for an additional $30.

Finally, SRAM cards ranging in price from $149 to $339 are available in capacities from 512K to 2MB. Memory card prices do not include the $39 CardMaster or the $29 Flash File System software.

Rancho PCMCIA SCSI Card

Rancho Technology, Inc. has announced the release of a new 16-bit Type II PCMCIA SCSI Card, the RT7000. This card is designed to draw low power, and will go into sleep mode when not being used. The card supports hot swapping and autoconfiguration. The card comes with a 33-pin PCMCIA to 50-pin SCSI-2 cable. An optional 50-pin Centronics SCSI cable is also available. The RT7000 is priced at $220, and large-quantity discounts are available.

V.FAST PCMCIA Fax Modem

SMART Modular Technologies has announced a $499 V.FAST-compatible high-speed PCMCIA fax modem card, the ST288VFC, capable of a rate of 28.8kbps for data and 14.4kbps for fax. The card draws 200mA while operating, and 4mA in "sleep mode" during no activity periods. ■

Copyright © 1994 by Mitsu Hadeishi. All rights reserved.

64-Bit Graphics Acceleration under $219

Introducing the #9GXE64 family; the first affordable line of 64-bit graphics accelerators for Windows, DOS, Multimedia and CAD. You get very high performance at a low cost. Run Windows in a full range of screen resolutions, color depths and DoubleWide™ virtual desktop choices. For entertainment, the 64-bit graphics engine jacks your VGA games into *real time*! And multimedia never had it so good. The #9GXE64 applies drawing speed, high resolutions, unmatched display controls and versatility to the world of mainstream computing. It makes all the difference in our delivering the most reliable value-driven graphics solutions you can buy.

Windows & Windows NT

OS/2 v2.1

XWindows

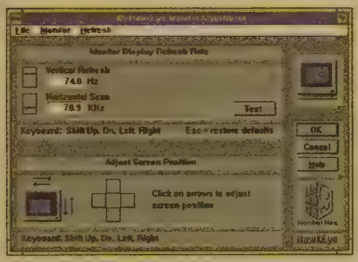
AutoCAD®

MicroStation PC

#9GXE
1993

Energy Star

Made in the USA


HawkEye Monitor Adjustment
File
Monitor
Refresh
Monitor Display Refresh Rate
Test
OK
Cancel
Help
Adjust Screen Position
Click on arrows to adjust screen position
Number Nine
HawkEye

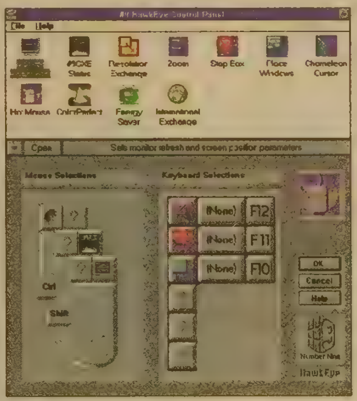
Vertical Refresh 74.0 Hz

Horizontal Scan 78.9 KHz

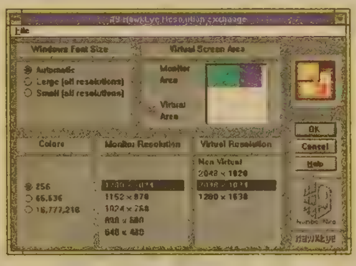
Keyboard: Shift Up, Dn, Left, Right   Esc = restore defaults

Keyboard: Shift Up, Dn, Left, Right

Monitor Adjustment: Fine tune your screen refresh to the peak performance of your monitor with easy push-button controls.


HawkEye Control Panel
File
Help
#9GXE Status
Resolution Exchange
Zoom
Step Box
Place Windows
Chameleon Cursor
Hot Mouse
ColorPerfect
Energy Saver
International Exchange
Open
Sets monitor refresh and screen position parameters
Mouse Selections
Keyboard Selections
Ctrl
Shift
(None)
F12
(None)
F11
(None)
F10
OK
Cancel
Help
Number Nine
HawkEye

Hot Mouse: Instantly activate frequently used HawkEye for Windows applets by assigning them to mouse or keyboard hot keys.


HawkEye Resolution Exchange
File
Windows Font Size
Virtual Screen Area
Monitor Area
Virtual Area
Colors
Monitor Resolution
Virtual Resolution
OK
Cancel
Help
HawkEye

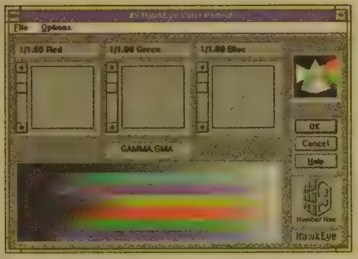
● Automatic
○ Large (all resolutions)
○ Small (all resolutions)

● 256
○ 65,536
○ 16,777,216

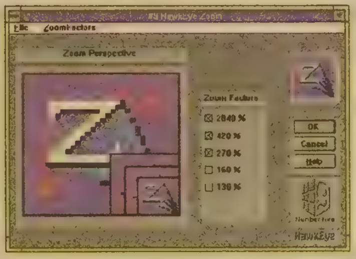
1152 x 870
1024 x 768
800 x 600
640 x 480

Non Virtual
2048 x 1024
1280 x 1638

Resolution Exchange: An all-in-one resolution control center to easily select color depth, screen resolution and virtual desktop size.

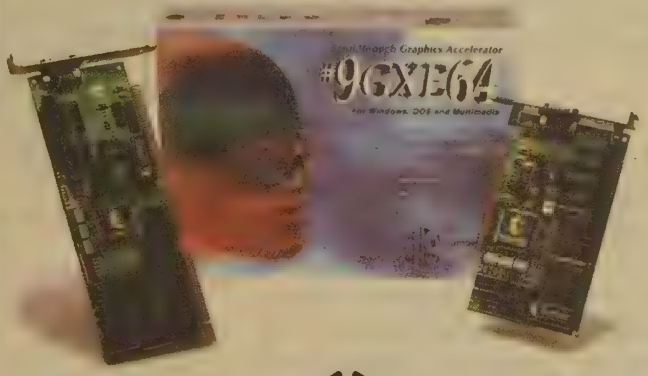

HawkEye Color Perfect
File
Options
1/1.00 Red
1/1.00 Green
1/1.00 Blue
GAMMA GMA
OK
Cancel
Help
Number Nine
HawkEye

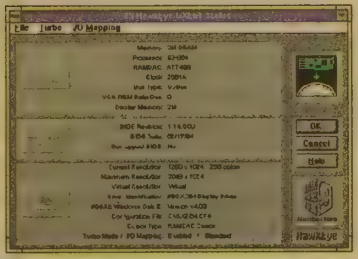
Color Calibration: Match screen tones to Pantones® or any other check-standard for color accurate pre-press results. (GXE64*Pro* only)


HawkEye Zoom
File
Zoom Factors
Zoom Perspective
OK
Cancel
Help
Number Nine
HawkEye

Zoom Factors
☒ 2040 %
☒ 420 %
☒ 270 %
☐ 160 %
☐ 130 %

Hardware Zoom: For close-up views, instantly magnify your screen up to five times normal size. Panning brings every pixel into view.

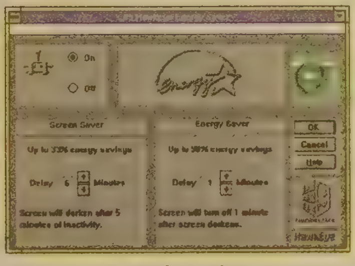

#9GXE64
Graphics Accelerator
for Windows, DOS and Multimedia


HawkEye GXE64 Status
File
Turbo
I/O Mapping
OK
Cancel
Help
Number Nine
HawkEye

Instant Status: Hardware and software configuration data is immediately available to quickly pinpoint system state-of-health.

VESA Local Bus

PCI


● On
○ Off
Screen Saver
Energy Saver
OK
Cancel
Help
HawkEye

Up to 33% energy savings
Delay 5 Minutes
Screen will darken after 5 minutes of inactivity.

Up to 90% energy savings
Delay 1 Minutes
Screen will turn off 1 minute after screen darkens.

Energy Saver: DPMS-compliant power management conserves electricity and money by reducing energy loads up to 90%.

Number Nine

The Total Display Solution. You look for value in everything you buy. In PC graphics, there are many features that contribute to ultimate value. Reliability, performance, ease of use, affordability, visual clarity and system compatibility are all part of a total display solution. At Number Nine, we call this added value *HawkEye for Windows*.

HawkEye is our optimized Windows driver that controls over a dozen advanced display functions to help you work smarter. We pioneered display applets to push all our cards to their full visual potential.

HawkEye is quick, easy to install and very intuitive to use. It will open you to the world of the virtual desktop, tune your monitor to its peak performance, conserve energy, select your favorite video modes and control almost every aspect of the display environment.

With so many graphics boards vying for your attention, only one includes the value of HawkEye. The #9GXE64 family with HawkEye for Windows. The *affordable* 64-bit graphics accelerators with a real difference.

Best of COMDEX Spring '94
Imagine-128
1994
Winner-Best
Peripheral

1994 WIN AWARD
Windows Magazine
#9GXE64
April 1994

PC
Budget Recommendation
#9GXE64
May 1994

Computing Hardware 200 Finalist 1994
#9GXE64
April 1994

Number Nine GXE
MVP
WINNER
#9GXE
Nov 1993

April 1994 BYTE
Pournelle's User's Choice Award
April 1994
#9GXE ISA

Windows
Experts Pick
#9GXE
March 1994

Highly Recommended
#9GXE
August 1993

DISPLAY MODES

	Pixel Clock		Screen Resolutions						Virtual Desktops	
		Color	1600x1200	1280x1024	1152x864	1024x768	800x600	640x480	2048x1024	1600x600
#9GXE64 1 MB DRAM **S3-864**	135 MHz		-	-	256	256	65K	16M	-	256
#9GXE64 2 MB DRAM **S3-864**	135 MHz		-	256	256	65K	16M	16M	256	65K
#9GXE64*Pro* 2 MB VRAM **S3-964**	135 MHz		-	256	256	65K	16M	16M	256	65K
#9GXE64*Pro* 4 MB VRAM **S3-964**	135 MHz		256	65K	16M	16M	16M	16M	65K	16M

A variety of virtual desktop modes are available, including 2048 by 2048 on 4MB #9GXE64*Pro*

The *Affordable* 64-bit Graphics Accelerators℠

Available at Fry's Electronics, NCA Computer Products, HD Computer, Access Computers, ASA Computers, Laitron, Central Computer, Chicotec, Hi-Tech USA, Aim Computers, Paramount Computers, InfoQuest & Other Fine Stores

© 1994 **Number Nine** Computer Corporation 18 Hartwell Avenue Lexington, Massachusetts 02173 **BBS**: 617 862 7502 **Fax**: 617 674 2919 **Voice** 800 GET NINE

Number Nine, the Number Nine logo and HawkEye are registered trademarks and GXE64, ZeroFlicker, PowerPac and DoubleWide are trademarks of Number Nine Computer Corp. All Rights Reserved

LAPTOPS • ED KAHN

A New Hard Drive For Older Laptops

The New Kingston Data Traveler Offers Amazing Versatility

The days of making do with a small hard drive are over. The growing size of newer programs and the nearly universal acceptance of Windows, have made hard drives one of the major limitations for older portable computers. If you use Windows and a couple of applications you will need a larger drive than you imagined only a few years ago. For instance, not too long ago, DOS could not accommodate hard drive partitions larger than 32MB. Now, a 32MB hard drive would be a joke; many notebook computers today are coming with drives in excess of 200MB.

The impact of this change is that while many older laptops are still in perfect working condition and do everything you might want, their hard drives seem to grow smaller and smaller with each passing day. For desktop machines, it is fairly easy to install a larger hard drive. But in many portables, it is simply not practical to do this. The hard drive housing is usually proprietary and must be an exact match to fit into the portable. Thus, the solution has been to search for some sort of alternative or purchase a new computer.

Over the years, there have been many portable drives, but Kingston Technology's new Data Traveler DT200ex is especially well designed and can add years of service to your portable.

The Data Traveler has many features and works equally well with a desktop computer. But it is really directed towards the portable market. The hard drive is available in two sizes: 127MB and 209MB. The package includes a hard drive that fits into a base (extra units are $145 each) and a cable that connects to the parallel port on your computer. (The design lets you use your printer through the same port.) The base snaps into a rechargeable battery pack (extras are $125). These three pieces—drive, base, battery—fit together to look like a single unit.

A final piece is the power supply. It will power the hard drive or recharge the battery pack. The battery pack gives you about three hours before needing recharging.

This design offers many advantages. First, the overall dimensions, including battery pack, are 7" x 5" x 2.6" and it weighs less than 3lbs. This is small enough to fit into your briefcase. An additional feature is that the hard drive itself is removable as well as small. This tiny 2.5" drive can be transported from one location to another or simply removed for security reasons. Also, after a hard drive is filled, you can swap it with another. Extra 127MB ($299) and 209MB ($380) hard drives, called carriers by Kingston, are available.

> The growing size of newer programs and the nearly universal acceptance of Windows, have made hard drives one of the major limitations for older portable computers.

This drive system offers amazing versatility. If you regularly carry data between a portable and a desktop computer, Kingston Technology offers a module that fits into any 3.5" or 5.25" drive bay. This will eliminate the need to connect through the parallel port of the desktop machine.

The Data Traveler DT200ex is simple to operate and works like any other hard drive. If you currently have a C drive, it will configure itself as a D drive. After connecting the hardware and going through the installation procedure, you will need to do a low-level format on the new drive. None of this is difficult and detailed, step by step instructions are given. At each step along the way, an illustration shows you just what your computer screen will look like and instructs you what to do next.

For users who are not technically oriented, the low-level formatting procedure can be intimidating. But these instructions are so clear that most people will feel comfortable—just follow the bouncing ball and everything will go smoothly.

Kingston Technology stands behind its product with a two-year warranty on the hard drive and a five-year warranty on the rest of the components. Additionally, should you have any questions that are not answered in the documentation, its technical support staff is available. I would change nothing on this product. If you are struggling with a perfectly good portable that has a hard drive that is too small, consider the Kingston DT200ex. ■

RESOURCES:

Data Traveler DT200ex 127MB package, $585; 209MB package, $665
Kingston Technology Corp.
17600 Newhope St.
Fountain Valley, CA 92708
(714)435-2600

WholeSale to the Public!

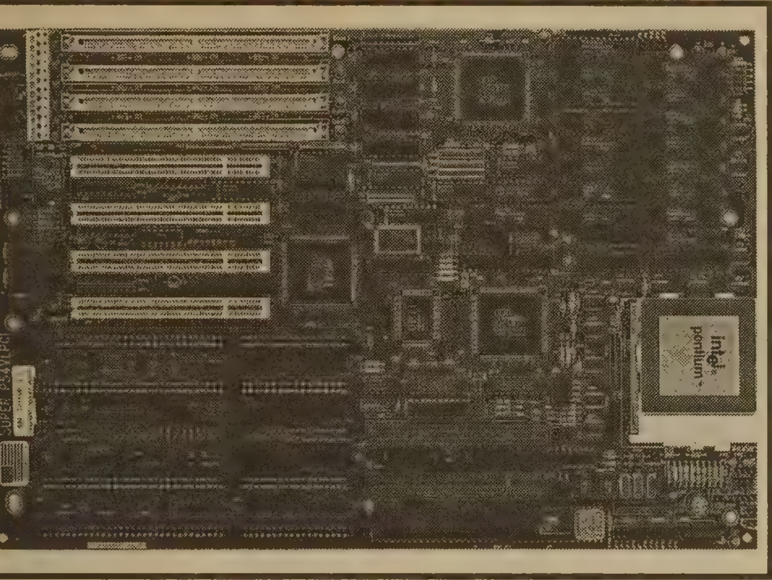
Manufacture Direct - Quantity Discounts Available!

High Quality Motherboards

Take a close look at our motherboard, you'll see why it's the best!

Super™ P54VL-PCI 100/90MHz Motherboard

With 4 PCI master slots and 2 buffer-enhanced VESA master slots, You get a total of 6 Local bus slots, the only one in the world. Our auto-detect green power saving functions makes another quality difference over other motherboards on the market. A cost and performance effective SCSI bundled solution with Adaptec 2940 PCI fast SCSI II, and 2940W fast and wide SCSi II option are also available. Made in USA, with design level technical support and service available. These are just some of the features that make the Acme Super™ Motherboard your choice for the fastest system performance, with the best upgradability and flexibility for the future.



Specifications:

•CPU	Pentium 100 or 90 MHz, 3.3V CPU
•PCI	4 PCI bus master slots
•VESA	2 buffer-enhanced VESA bus master slots
•ISA	5 16-Bit standard AT Slots
•Cache	64-bit wide data bus, supports 512KB or 256KB cache in either WB or WT mode
•DRAM	64-bit wide data bus supports up to 128MB on board
•GREEN	User-programmable Power Saving mode, provides CPU/System board power down and Monitor/Peripheral power saving functions

Performance tests:

Landmark	v2.00	575.77
Powermeter	v1.7	63.9
Norton SI	v4.5	202.2
Winbeanch	v3.11	75

Pentium 100/90 MHz, PCI/Vesa/Green, 256K, w/CPU-90, Made in USA

Only $1083

Pentium 90 MHz, PCI local Bus, 256K, w/CPU, Made by Intel	$1108
Pentium 60/66 MHz, PCI/Vesa/Green, 256K, w/CPU, Made in USA	748/883
Pentium 60/66 MHz, Vesa/Green, 256K, w/CPU, Made in USA	683/818
486DX4-100 256K with PCI SCSI/IDE/FDC controller & IO built-in, No CPU	245
486DX4-100 MHz, Vesa Local Bus with Zif Socket, 256K, No CPU	107
486 PCI & Vesa local bus with Zif Socket, 256K, No CPU	115
486 3*Vesa Local Bus with Zif Socket, Green, 256K, No CPU	88
486 3*Vesa Local Bus, Green, 256K, No CPU	83
386/486 Universal Board, 128K, No CPU	81
386DX-40 Main Board, 128K, w/CPU	81
386SX-40 Main Board, w/CPU	67

--Brand Name Video Graphics Card--

ATI Mach 64 with 4MB VRAM, PCI or Vesa	$498
ATI Mach 32 with 2MB VRAM, PCI Local Bus	228
ATI Mach 32 with 1MB DRAM, PCI Local Bus	108
ET4000 W321 Local Bus VGA with 1MB/2MB	93/148
Cirrus Logic 5428 Vesa Local Bus with 1MB	71
Trident 8900D Super VGA with 1MB	53
Trident 9400 VLB Local Bus with 1MB	63
Trident 9000 Super VGA with 512K	65

--Brand Name Controllers--

Adaptec 2940W SCSI 3 controller	$275
Adaptec 2940 SCSI Controller, PIC	225
Adaptec 2842 SCSI controller	225
Adaptec 1522A SCSI Controller	76
PCI SCSI Controller, NCR	65
PCI Local Bus IDE Controller	30
Vesa Multi IDE-I/O	18
ISA Multi IDE-I/O	12

--Brand Name Hard Drives--

2.1GB SCSI Quantum	$1150
1.0GB SCSI Conner	630
545MB SCSI Conner	330
1.0GB IDE Conner	550
810MB IDE Conner	418
540MB IDE Conner	288
420MB IDE Conner	208
270MB IDE Conner	188
210MB IDE Conner	163
Tape Back-ups	
Colorado 250MB	155

--Floppy Drives--

Teac 1.2 & 1.44	$79/Pair
Mistumi 1.2 & 1.44	$73/Pair

--Super VGA Monitors--

14" 1024x768 .28 Green	$212
14" 1024x768 .28	205
14" 1024x768 .28 Non-Int	218
14" 1024x768 .39 Non-Int	185
15" 1280x1024x1024 .28 Green Non-Int	325
17" 1280x1024 .28 Non-Int	668
NEC 4FGe	680
NEC 5FGe	1069
14" Mono	76
14' Mono VGA	88

--Keyboards--

Mitsumi 101 Keyboard	$15
Mitsumi 101 Enhanced	23
MaxiSwitch Keyboard	26
Keytronic 101 Keyboard	25

--Cases--

Full Tower with 250W power	$95
Middle Tower with 230W	66
Slim case with power supply	63
Desktop with 230W	42
Mini-tower with 230W	39
230W power supply	29

--CD ROM & Sound Card--

Mitsumi FX001D, 250ms 350kb/sec	$128
Sony CDU 33A, 320ms, 300kb/sec	128
Gallant Sound Card SC6000,16 Bit Kit w/ Microphone & Speakers	99
Sound Blaster 16 MCD (OEM)	79

--CD Titles--

6 CD Titles, 3 CD's '94 versions	$45

The Animals, Chessmaster 4000, Mavis Beacon Teaches Typing, Software Toolworks, Multimedia Encyclopedia, US/World Atlas

--Modems, Mouses, Oscillators & More--

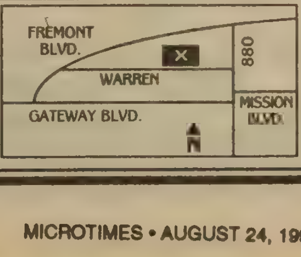
14.400/14.400 BPS fax modem	$68
9600/2400 BPS Fax/Modem	43
NE2000 compatible ethernet card	40
32Kx8 SRAM	4.50
Printer Cable	3
80MHz Crystal Oscillator	6
66.667MHz Crystal Oscillator	5.50
50MHz Crystal Oscillator	5
25MHz Crystal Oscillator	4
Fan for Pentium CPU	10
Heatsink with Fan for 486 CPU	5
MicroSoft OEM mouse enhanced	30
MicroSoft OEM mouse	23
3 Button serial mouse	7
Logitech Mouseman	48
PS 2 Bus Mouse	11

Prices subject to change without notice. Not responsible for typographical errors.

ACME MICRO SYSTEMS

46500 Fremont Blvd. • Fremont, CA 94538

(510) 226-6770 • FAX (510) 226-6773



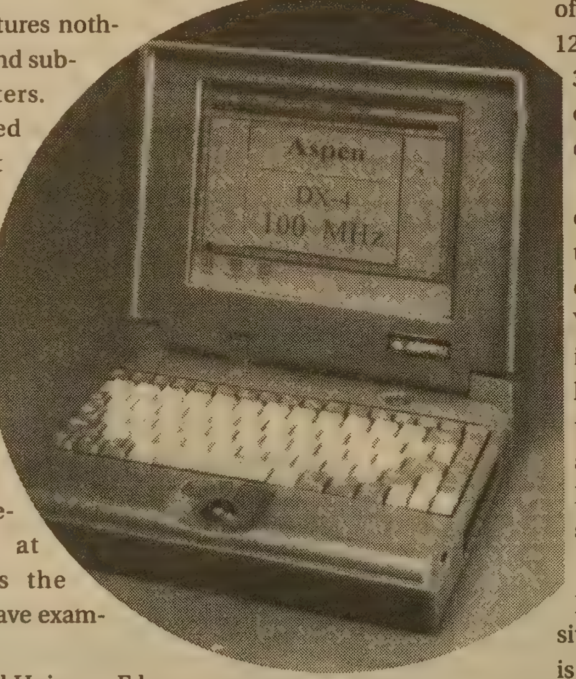
Computer Of The Month

Aspen's Powerful Universa E

In general, this column highlights portables that are either offered by national companies or by powerful regional companies that offer excellent products and service. From time to time, however, I feature a computer that comes from a small company located in another part of the country. This month, I review a new and powerful offering by Aspen, a small company located in New York State, but with the resources to service West Coast customers.

Aspen has been in business since 1991 and manufactures nothing but notebook and subnotebook computers. Originally, I wanted to talk about itssubnotebook, which appears to be an excellent entry, but when I talked with the company representative, I was persuaded to examine its new, powerful DX4 notebook running at 100MHz. This is the fastest portable I have examined to date.

Aspen's high-end Universa E has everything you could wish for: speed, memory, audio, color, and a host of other refinements that make this worth taking a look at. If you don't like the machine once you have it, it is fully returnable within ten days.



RESOURCES:

Universa E Notebook Computer, $3570
Aspen Computer, Inc.
5550 Main St.
Williamsville, NY 14231
1-800-472-3273

It has the footprint of a piece of business stationery, is 2" thick, and weighs a shade under 7lbs., including the two rechargeable nickel metal hydride batteries. The display measures 10" diagonally. While several configurations are available, Aspen's standard configuration includes 8MB of RAM, which can be expanded to 36MB, 128K of cache memory, and a removable 340MB hard drive. There is a 250MB hard drive (for $115 less) as well as a 520MB drive (for $200 extra).

The built-in color display is available in either active or dual-scan passive configurations. Aspen also offers a monochrome option. Although the display is VGA, if you connect an external monitor, it supports Super VGA. Like most other high-end computers these days, the system is equipped with 1MB of video RAM, a Windows accelerator, and a VESA Local Bus interface. The result is a fast video system.

The keyboard is as good as any of the portables. An excellent built-in trackball sits just below the keyboard. The trackball is large enough to use without going crazy. If you still want to add a conventional mouse, it can be connected through the serial port on the back of the computer.

While one serial and one parallel port are built into the Universa E, a Type IV PCMCIA slot will accommodate one Type III and one Type I or II device. In today's world, these slots make additional serial ports unnecessary as modems, network connections, and additional hard drives will fit into them. PCMCIA is changing the face of portable computing!

Two nickel metal hydride batteries are included, while the AC power supply should work almost anywhere around the world. The batteries provide power for up to three hours. Recharge time, unfortunately, is about six hours for the pair of batteries. Additional batteries ($90) are available.

If you intend to use the Universa E in your home or office, you might consider the addition of a full docking station ($550), which contains two serial ports as well as two built-in stereo speakers and a bay for either a CD-ROM drive or a 5.25" floppy drive. Four expansion slots give you the space to fully customize your system. If you do not need the extra card slots, you might consider buying the port replicator ($195), which lets you plug all of your accessories into the replicator and then simply unplug the replicator's one connection when you want to take the computer away with you. The replicator, by the way, also has two serial ports.

High-end systems increasingly provide for multimedia use. Aspen builds in both speaker and microphone, but also has ports for external microphone, line input, and external speakers. In addition, its hardware is compatible with both Sound Blaster and Microsoft Windows Sound.

The Universa Series E computers come with a carrying case and have a warranty extending two years on labor and one year on parts. Replacement units are available and turnaround time is twenty-four hours. There is unlimited technical support available through an 800 number. ■

Copyright © 1994 by Ed Kahn. All rights reserved.

DISCOVER THE CUPERTINO COMPUTERS DIFFERENCE!

LARRY WOOD – OWNER

386DX-40C128 ....$259
486SX-40C128 349
486SLC2-66 VLB 409
486DX-40C256 VLB 419
486DX-50C256 VLB 549
486DX2-66C256 VLB 489
PENTIUM 90 C256 PCI 1209

1 YEAR PARTS, 3 YEAR LABOR WARRANTY ON ALL SYSTEMS
MON-FRI 10:00-6:00
SATURDAY 11:00-4:00
Corporate P/O's Welcome
SALE PRICES FOR CASH CUSTOMERS NO CREDIT CARDS
Prices & availability subject to change w/o notice

STANDARD SYSTEM: Motherboard & CPU, 1MB RAM, Desktop or Mini Tower Case, 230 Watt Power Supply, 101 Key Enhanced Keyboard, 2 Hard/2 Floppy Disk 1:1 Controller Card, AMI Bios, 1.2 or 1.44 MB Floppy Drive, 2 Serial/Parallel/Game I/O Ports.

CUPERTINO COMPUTERS INC.
10675 S. DE ANZA BLVD., CUPERTINO, CA 95014
TEL: (408) 255-5997 FAX: (408) 255-7699

STOP! You Paid too much if you bought your computer some where else. LOWEST PRICE is not the only thing you can count on. 100% customer satisfaction quality product and lowest prices is our goal, thousands of satisfied customers Since 1984. Check us out!

HEWLETT PACKARD

HP Laserjet 4L/4ML	$639/969
HP Laserjet 4P/4MP	$949/1309
HP Laserjet 4/4 Plus	$1295/1379
HP Laserjet 4M/4M Plus	$1869/1899
HP Laserjet 4SI/4SI MX	$2849/4449
HP Deskjet 520/500C	$277/349
HP Deskjet 560C/310 Port	$550/299
HP Deskjet 1200C/1200 CPS	$1388/2249
HP Deskwrite 310/520/560C	$295/282/559

APPLE

Power Mac 6100/60 8/250 w/CD	$2119
Power Mac 6110/60 8/160	$1649
Power Mac 7100 16/250 w/Soft Windows	$3039
Power Mac 8100 8/250 CPU	$3899
Power Mac 8100 AV	$5199
Quadra 610 8/230 - 605 4/160	$1649/999
Quadra 650 8/230 - 840 AV 8/230 CD	$1999/Call

UPGRADES

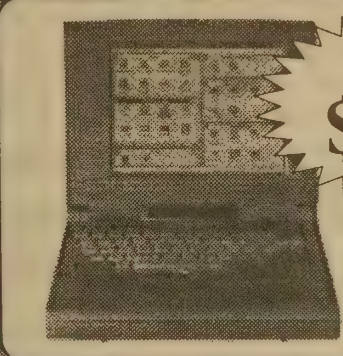
Memory ea. MB, 2nd FL.	$45/49
270, 340 MB HD	$79/99
420, 540 MB HD	$129/229
Sound Card	$79
Fax Modem 9600/14.4	$59/129
SVGA 15" 17" Monitor	$249/500

COMPAQ

Contura Aero 4/25 4/84	$989
Contura Aero 4/33C 4/170	$1989
Contura 4-25 120HD/4-25C 209HD	$1699/2307
Concerto 4-25 120HD/4-33 250HD	$1279/1459
LTE Lite 4-25 120HD/4-25 E 120HD	$2099/2829
LTE Lite 4-40 CX Active	$3799
Prolinea 486SX33 4/340 / 486DX/50 4/200	$1270/1425
Deskpro 486 S/33 340HD/XE Pentium 60	$1359/Call
Deskpro XE 450 Model 340 W/XE 560 Model 525W.	$2169/2925
Deskpro XL 450 Mdl.270 CDS/XL 560 Model 535W .	$2453/3538
Prosignia VS 8/no HD	$1699
Proliant 1000 486DX 2-66	$4249

TOSHIBA

T 1900 C 4/120 / T 1910/200 Mono	$1699/1445
T 1960 CS 4/200 / 1960 CT 4/200	$2369/2969
T 2400 CS 4/250 / T 3400 4/120	$2899/1899
T 4700 CS 8/200 / T 4800 CT 8/500	$3099/Call



From

$999

486 NOTEBOOKS 486, SL, 486SX, 486DX Rock Bottom Prices.

IBM

IBM Thin Pad 350 4/125-350C 4/250	$1499/2049
IBM Thin Pad 360 4/170-360C 4/250	$1829/2349
IBM Thin Pad 755C 4/540-755CS 4/540	Call/5899
IBM PS/1 2155-41T 486DX2 50	$1599
IBM PS/1 2155 50T 486DX2 66	$1899
IBM PS/Value Point 486SX 33	$1125
IBM PS/Value Point 486SL 25	$775
IBM Value Point 486DX 33 4/120	$1199
IBM Value Point 486DX2 66 4/no HD	$1699

APPLE

Power Book 150 4/120 / 520 4/160	$1399/2149
Power Book 520C 4/160 50 MHZ	$2695
Power Book 540C 4/320 66MHZ	$4495
Power Book DUO 280 4/240	$2499
DUO Dock 512K V Ram	Call
Apple Mac 14" Monitor/14" Plus	$299/319
Apple Mac 17"/20" Multiple Scan Disp.	$979/1999
Apple Style Writer II/Pro Color	$279/599
Apple Personal Laser Writer 320	$899
Laser Writer Select 360	$1499
Apple One Scanner/Color One Scanner	$669/995

MOTHER BOARDS

Universal 486, 25, 33, 40, 50, DX 2 w/o CPU	$89
Universal 486, DX2 66, DX4 100 w/o CPU	$119
IBM 50, 66, 75, MHZ with CPU	$169/229/359
Pentium 66, 90 w/o CPU	$200/410

Lifetime Tech Support and Labor Warranty

SYSTEM REPAIRS

Systems repairs, upgrades. On site service, maintenance contract, same day on site service plans, call for details and prices

IBM 486 75 MHZ 256K CACHE

IBM 486, 50, 66 SLC 2, 75 MHZ IMB Blue Lightning BL3X VESA Motherboard, 4 MB Ram expandable up to 64 MB, 16K, 64K, 128K, 256K cache upgradable to 512K. Math Co-Processor, 2 SR, 1 PR, 1 game port, 1.2 or 1.44 floppy drive, 210 MB HD. IDE HD/FL Cont. SVGA card w/1MB, .28 SVGA 14" monitor, two VLB slots, seven 16 bit and one 8 bit slot, motherboard made in U.S.A. by IBM, mini-tower or desktop case w/230 watt PS. 101 keyboard, compleatly tested and 72 hr burn in.

IBM SLC 2-50	$899
IBM SLC 2-66	$959
IBM BL3X-75	$1159

486DX 4 100 MHZ

486-33, 40, 50, 60, 75, 100 MHZ Processor, 4 MB Ram expandable up to 128 MB, 256K Cache expandable up to 512, 3 VESA 32 bit, 5 16 bit, 1 8 bit exp. slot, 1.2 or 1.44 Floppy drive, IDE HD/FL cont., 210 MB IDE Hard Disk, changeable clock speed with jamper setting from 33 up to 100 MHZ, 2 SR, 1 PR, 1 game port, SVGA 1 MB video card, SVGA 1024x768 .28 DP monitor, 101 keys enhanced keyboard. Complete set of documentation. Compleately assembled, tested and 72 hr. burn in.

486-33 VLB	$1099	486-66 VLB	$1299
486-40 VLB	$1149	486-75 VLB	$1529
486-50 VLB	$1199	486-100 VLB	$1659

INTEL PENTIUM 90 MHZ, PCI-ISA, 256K Cache

INTEL Pentium, 66, 90 Mhz motherboard, 256K Cache, (Max 512K) OK Ram expandable to 128 MB, PCI/IDE,ISA interface card, 1.44 and 1.2 Floppy drive, mini tower or desktop case w/230 watt power supply (optional full tower case). 101 keys keyboard , optional VLB 32 bit 1 MB SVGA video card

INTEL PENTIUM 66MHZ	$1429
INTEL PENTIUM 90MHZ	$1559

intel inside

Reffko Inc.

Ph. (510) 490-8600
Fax (510) 490-8778

46560 Fremont Blvd. #201 • Fremont, California 94539 • *Open Monday - Friday 9-6*

All systems come with one or three year parts, lifetime labor and technical support warranty. Warranty voids if misuse, abuse or damage. 20% restocking charge on all returns, no returns after 7 days. Prices and availability subject to change without notice. Not responsible for typographical error. All brands and product names are trade marks of their respective companies.

ACCOUNTING • BY DAVID SIMON, CPA, AND JENNIFER R. CHERNISS

Accounting Software For Consultants

Windows-Based Personal Accounting Packages That Offer Useful Tools To Help Manage Your Books

Consultants, contract workers, and those in business for themselves may not consider bookkeeping their favorite pastime. Keeping accounting records, however, is like visiting the dentist: you can loose your teeth if you don't.

This article examines three Windows-based "personal" accounting packages that can make life easier for micro-small businesses at minimal cost. They are: Meca Software Managing Your Money, Computer Associates Kiplinger's CA-Simply Money, and Intuit Quicken; as well as a fourth package, Microrim In the Black, which has a little more horsepower.

Personal accounting software focuses on tracking expenditures and maintaining checkbooks. Different packages variously offer additional features such as investment tracking, budgeting, invoicing, contact management, monthly account reconciliations, and online services for trading securities or banking.

While the basic set of features may be inexpensive, this is not necessarily true for the accessories. Services such as online banking and stock trading do cost extra for those who use them. Thus, a user may fill their accounting needs better by foregoing extra features that will rarely be used and concentrate on the specific features they do want.

Personal accounting software is too limited for many small businesses. But for a sole proprietor or consultant whose primary need is to organize financial records without making a second career of it, they're the proper tool for the job.

Because of employment tax laws, many contract workers are feeling pressured to incorporate in order to open some job opportunities. Passengers in that boat need to keep a balanced set of books, showing assets and liabilities, from which to prepare corporate income tax returns. Partnerships also require scrupulous bookkeeping. As a practical matter, a computerized accounting system is the best answer.

Packages road tested here are designed so that non-bookkeepers can create and record transactions relatively easily—one vendor boasts that users "can't mix up debits and credits or journals and ledgers." Routine transactions are made in friendly ways, such as by filling in a graphical display of a check, or clicking-on cleared checks when performing bank reconciliations.

Despite their simplicity, you still ought to touch base with your accountant at critical times. For example, problems can result from the way the software is initially set up if the chart of accounts isn't adequately tailored to your needs. Another critical time, if you're incorporated, is when you record various year-end tax adjustments typically provided by your tax preparer.

When selecting personal accounting software, it's easy—but unnecessary—to get neurotic about the inherent tradeoffs between programs. Accept the fact that these packages are limited. Even if your basic needs are met, you may never be completely happy with any of them. And don't count on helpful recommendations from a financial, accounting, or management consultant; they don't make their living by recommending $50 software. One CPA I know, asked by a client to meet for a consultation on personal accounting software, advised "Let's not. Just pick one and get it." Fortunately, even if you select the "wrong" software, you'll probably still be able to generate the reports needed on April 15th.

On the other hand, the right package will offer important conveniences and useful tools to help manage your books and your practice; enough so to justify doing some homework and shopping for features.

> THE KEY ASPECT OF PERSONAL ACCOUNTING SOFTWARE IS ITS SIMPLICITY. SO RESIST THE TEMPTATION TO BUY MORE THAN YOU NEED.

Quicken

With Quicken, Intuit has shaped the market perception of personal accounting by much the same means that McDonald's redefined the French fry, through stepwise modifications based on extensive market research of user needs. Intuit zealously keeps their product current from ground-up, rather than coating and pampering soggy source code, as many market leaders tend to do after a while.

The program covers all the bases of personal accounting software: it manages bank and credit card accounts, tracks investments and other assets, reports on jobs or projects, creates budgets, writes checks, pays bills electronically, and links to tax packages. If you don't want to make a big deal of shopping, or if you're the type who likes to stick to an established "standard," Quicken is probably your safest choice.

On the downside, some of the descriptive field sizes are too limited. Although Quicken's investment module tracks mutual funds, it won't compute the gain or loss on shares you sold by applying the "average cost" method of accounting. Unless you're willing to do laborious computations manually, you therefore might get less than the best deal at tax time.

Also, Intuit discourages add-on enhancements by not releasing source code to third-party developers. This could be a drawback, for example, if you want to integrate a third-party time and billing package, such as Timeslips. One solution here is to upgrade from Quicken to Intuit's somewhat higher-level version, QuickBooks. QuickBooks handles invoicing and other business functions, but you give up the investment features entirely. You'll thus have to choose between the two.

Managing Your Money

Managing Your Money (MYM) does all the things you'd expect of personal accounting

continued on page 300

AcerPower, AST, AT&T, Compaq, Digital, Gateway 2000, IBM, Insight, Blue Max, Mega, Micro Express, Mitsuba, ACMA, ALR, Amax, Austin, InfoGold, Diamond, PC&C, Iguana, Poly, Tagram, Tangent, Unis, United Solutions, Unitek, Mircon, NEC, Tri-Star,

HiQ beat em' all!

PC MAGAZINE EDITORS' CHOICE
April 26, 1994
HiQ 4DX66 Green PC System

Excellent DOS Applications

PC MAGAZINE EDITORS' CHOICE
April 26, 1994
HiQ 4DX66 Green PC System

Excellent Window Applications

PC MAGAZINE EDITORS' CHOICE
April 26, 1994
HiQ 4DX66 Green PC System

Best Value Among EPA Systems

There's only one choice, Editor's Choice-HiQ

HIQ Earth 4DX2-66 Green PC

- Intel 486DX2- 66MHz Processor
- 8MB RAM expandable to 64 MB
- 256K SRAM Cache
- 1.44MB TEAC Floppy Drive
- 420MB IDE Hard Drive
- 32-Bit VESA LB IDE Controller
- AT I/O Card 2S, 1P and 1G Ports
- 32-Bit Genoa 8500 SVGA Card w/1MB RAM
- 15" ADI 4GP Color Monitor 1280 x 1024 .28dp Non-interlaced
- 101 Enhanced Keyboard
- Mid Tower Case w/230w P/S
- * MS DOS 6.21 and WIN 3.11 w/Manuals
- HIQ Serial Mouse w/Mouse Pad

Price $1699

HIQ Earth 4DX100 Green PC.....$2059

Three good reasons you should buy Green PC.

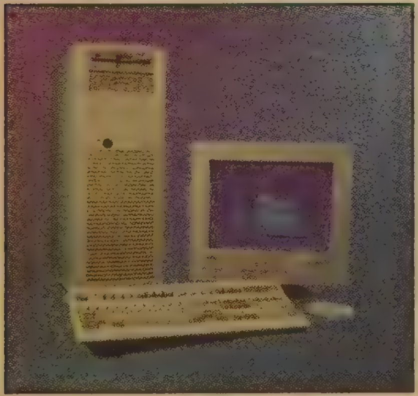
1. Save on your Electricity Bill
2. Reduce Air Pollution
3. Prolong your system's life

This chart will show you how much you can save a year:

Energy Star
PCs That Add to the Bottom Line

Traditional PC	24 hours	—	$131.40
Energy Star–compliant PC	8 hours	16 hours	$78.84
Energy Star–compliant PC	3 hours	21 hours	$62.42

* Based on a charge of 10¢ per kilowatt hour.



HIQ Venus Workstation

- Intel Pentium™ Processor
- Intel PCI Motherboard
- 8MB RAM expandable to 128 MB
- 256K SRAM Cache
- 1.44MB Teac Floppy Drive
- 540MB IDE Hard Drive
- Integrated PCI Local Bus Enhanced IDE Controller
- AT I/O Card, 2S-Hi Speed and 1P Ports
- PCI Local Bus SVGA Card w/1MB RAM
- 14" Color Monitor 1024 x 768 .28dp, Non-interlaced
- 101 Enhanced Keyboard
- Mid Tower Case w/250w P/S
- MS DOS 6.21 and WIN 3.11 w/Manuals
- HIQ Serial Mouse w/Mouse Pad

Enhanced IDE Faster Technology

HIQ Venus P90...$2529
HIQ Venus P66...$2339
HIQ Venus P60...$1999

PC MAGAZINE

"Top-notch Windows performance."
"Best graphics Winmark and Winstone scores were the best to date."
PC Magazine Jan 25, 1994

FREE Financing! for 90 Days!*
100% Financing Available-LOW Monthly Payments!
30 Day "No Questions Asked" Money-Back Guarantee

- FREE Lifetime Technical Support
- One Year Parts & 2 Years Labor Warranty
- Customized Configurations & Leasing
- Corporate & Government P.O.s Welcome!
- With Credit Approval

Since 1987, HiQ has set the standard for sales and service in the personal computer market place. With offices from California to Boston, HiQ has the experience and knowledge to help you achieve your personal and business computing goals. There are many companies that will sell you a computer, but only one that will back you up with technical support, quality equipment and good old-fashioned service. If you're looking for a computer or an entire Local Area Network, HiQ wants to help you make the job easy.

Call HiQ today!

1-800 827-5836

Store Hours
Monday - Friday: 9am to 6pm
Saturday: 11am to 4pm

HIQ
HIQUALITY SYSTEM, INC.

HiQ Uranus P90 Dual Processor Lightning Fast Station

Wide SCSI Fast Technology

- ▲ Dual Intel Pentium 90MHz P54C/P54CM Processors
- ▲ EISA/PCI LB Motherboard
- ▲ 16MB RAM Expandable to 128MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 1.0Gbyte SCSI Hard Drive
- ▲ Adaptec 2940 Wide PCI SCSI Controller w/7 Devices
- ▲ AT I/O Card 2S, and 1P Port
- ▲ Diamond Stealth 64 PCI SVGA Card w/2MB RAM
- ▲ 15" ADI 4GP Color Monitor 1024 x 768 .28dp
- ▲ 101 Enhanced Keyboard
- ▲ Full Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manual
- ▲ HIQ Serial Mouse w/Mouse Pad

ADI Monitor 2 Year Warranty

Price

$5299

HiQ Neptune Powerstation

Wide SCSI Fast Technology

- ▲ Intel Pentium™ Processor
- ▲ Intel PCI Motherboard
- ▲ 16MB RAM Expandable to 128MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 1.0Gbyte SCSI Hard Drive
- ▲ Adaptec 2940 PCI Wide SCSI Controller w/7 Device
- ▲ Onboard AT I/O card 2S-Hi Speed, and 1P Port
- ▲ Diamond Stealth 64 PCI LB SVGA Card w/2MB VRAM
- ▲ 15" ADI 4GP Color Monitor 1024 x 768 .28dp
- ▲ 101 Enhanced Keyboard
- ▲ Full Tower Case with 250W Power Supply
- ▲ MS DOS 6.21/WIN 3.11 w/Manual
- ▲ HIQ Serial Mouse w/Mouse Pad

HIQ Neptune P90..............$3899
HIQ Neptune P66..............$3699
HIQ Neptune P60..............$3349

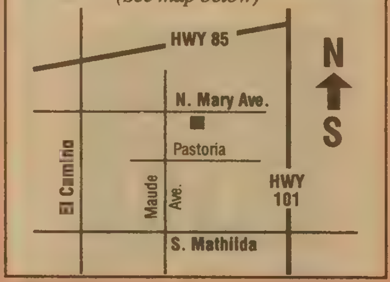
HiQ Pluto P66 EISA/PCI Server

- ▲ Intel Pentium 66MHz Processor
- ▲ EISA/PCI Local Bus
- ▲ 16MB RAM Expandable to 128MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 1.0Gbyte SCSI II Hard Drive
- ▲ PCI Local Bus SVGA Card Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ PCI Local Bus SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 .28dp, Non-interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Full Tower Case with 250W Power Supply
- ▲ MS DOS 6.21/WIN 3.11 w/Manual
- ▲ HIQ Serial Mouse w/Mouse Pad

Price

$3199

Stop by our convenient Sunnyvale Store
(See map below)



Call HiQ today!

1-800 827-5836

Northern California Locations:

South Bay
740 N. Mary Avenue, Sunnyvale, CA 94806
(408) 245-5836, Fax: (408) 245-3108

Marin County
2048 Fourth St., San Rafael, CA 94806
(415) 459-1893, Fax: (415) 459-7248

Sacramento
1967 Zinfandel Dr., Rancho Cordova, CA
(916) 635-7842, Fax: (916) 635-3692

HiQ Mercury Station

- ▲ Intel 486 Processor
- ▲ 8MB RAM Expandable to 64MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 420MB IDE Hard Drive
- ▲ 32 Bit VESA LB IDE Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ 32 Bit VESA LB SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 0.28dp Non-Interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Mid Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manual
- ▲ HIQ Serial Mouse w/Mouse Pad

HIQ Mercury 4DX100...$1799
HIQ Mercury 4DX266...$1489
HIQ Mercury 4SX33.....$1299

HiQ Mars PCI Station

- ▲ Intel 486 Processor
- ▲ 8MB RAM Expandable to 64MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 420MB IDE Hard Drive
- ▲ 32 Bit PCI Local Bus IDE Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ 32 Bit PCI Local Bus SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 0.28dp Non-Interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Mid Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manual
- ▲ HIQ Serial Mouse w/Mouse Pad

HIQ Mars/PCI 4DX100...$1899
HIQ Mars/PCI 4DX266...$1539
HIQ Mars/PCI 4SX33.....$1349

HiQ Saturn Station

- ▲ Intel 486 Processor
- ▲ **Micronics Motherboard**
- ▲ 8MB RAM Expandable to 64MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 420MB IDE Hard Drive
- ▲ Integrated 32 Bit VESA Local Bus IDE Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ 32 Bit VESA Local Bus SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 0.28dp Non-Interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Mid Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manual
- ▲ HIQ Serial Mouse w/Mouse Pad

HIQ Saturn 4DX266...$1699
HIQ Saturn 4DX33.....$1659

Upgrade Option

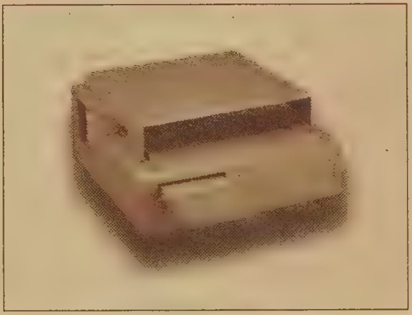
420MB to 540MB IDE .....Add $95
420MB to 1.0Gbyte IDE ....Add $485
540MB to 1.0Gbyte IDE ....Add $395
420MB to 1.0Gbyte SCSI ...Add $599 w/VESA LB SCSI Controller
540MB to 1.0Gbyte SCSI ...Add $499 w/VESA LB SCSI Controller
420MB to 1.0Gbyte SCSI ...Add $565 w/PCI LB SCSI Controller
540MB to 1.0Gbyte SCSI ...Add $475 w/PCI LB SCSI Controller
14" to 15" ADI 4G SVGA 1280 x 1024 .28dp, Digital Control, Low Radiation Green Feature, 2 Years Warranty ....Add $175
14" to 15" ADI 4GP SVGA 1280 x 1024 .28dp, Digital Control, Low Radiation Green Feature, 2 Years Warranty ....Add $455
15" to 17" ADI 5EP SVGA 1280 x 1024 .28dp ....Add $275
Mid Tower to Full Tower Case Add $39
250MB Internal Tape Drive w/Software & Tape ....Add $159
14.4/14.4 Modem/Fax .....Add $79

Multimedia Notebook

Patriot 4000 Multimedia Notebook

- ▲ Intel SL Enchanced Processor
- ▲ **4MB RAM Expandable to 32MB**
- ▲ **1MB Flash ROM Programmable BIOS**
- ▲ Detachable 3.5" 1.44MB Floppy Drive
- ▲ **170MB IDE Hard Drive (250/340/540 available)**
- ▲ 32 Bit VLB SVGA 1024 x 768 w/1MB RAM
- ▲ 9.5" Viewable Screen Size
- ▲ Mono or Dual Scan or Active matrix
- ▲ 86 Keys w/Inverted T Cursor
- ▲ **Extra Large 25MM Built in Trackball**
- ▲ PCMCIA 2Xtype II, 1Xtype III Slots
- ▲ 1 Serial, 1 Parallel, 1 Ext, SVGA, Docking Station Port
- ▲ **Built in Sound Card (Sound Blaster Comp) w/1 Line in, Line Out, 1 Mic**
- ▲ Rechargeable Nimh Battery
- ▲ Black Carrying Case
- ▲ Auto Switching AC/DC Adapter
- ▲ Mono 11.4 x 8.7 x 1.77", 5.5LBs
- ▲ Dual Scan 11.4 x 8.7 x 1.88", 5.9LBs
- ▲ Active Matrix 11.4 x 8.7 x 2", 6.1LBs

MONO		DUAL SCAN		ACTIVE MATRIX	
486SX-33MHz	**$1529**	**486SX-33MHz**	**$2079**	**486SX-33MHz**	**$3129**
486DX-33MHz	**$1689**	**486DX-33MHz**	**$2239**	**486DX-33MHz**	**$3289**
486DX2-66MHz	**$1729**	**486DX2-66MHz**	**$2279**	**486DX2-66MHz**	**$3329**



DOCKING STATION

- ▲ Three Full Length 16 Bit ISA Slots
- ▲ One Half Length 16 Bit ISA Slots
- ▲ 2-5.25" Ext Drive Bays
- ▲ 1-3.5" Int Drive Bays
- ▲ One Serial/One Parallel/One Ext Keyboard
- ▲ PS/2 Mouse Port/SVGA Video Port
- ▲ 14.34" (W) x 14.34" (D) x 3.72 (Front) x 6.35" (Rear)

Price **$449**

TEL: (408) 245-5836 Fax: (408) 245-3108
740 North Mary Avenue, Sunnyvale, CA 94086

Ordering Information: Shipping and handling additional. Corporations rated 32A or better and Government accounts are accepted on a 30 net basis. C.O.D. orders over $500 add $10.00 special handling charges. Fill returns must have prior authorizations from our Customer Service Department (408) 245-5836. Fill returns must be in original packaging and include all warranty cards and manuals. Incomplete product returns, unauthorized returns and refuse shipments are subject to a 20% re-stocking charge. Fill prices and specifications are subject to change without notice. All trademarks belong to their respective companies. Not responsible for typographical errors.

HIQ
HIQUALITY SYSTEM, INC.

MULTIMEDIA

HiQ Jupiter 4SX33 Multimedia

- ▲ Intel 486SX-33MHz Processor
- ▲ 4MB RAM Expandable to 64MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 210MB IDE Hard Drive
- ▲ 32 Bit VESA Local Bus IDE Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ 32 Bit VESA Local Bus SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 .28 dp, Non-interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Mid Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manuals
- ▲ HIQ Serial Mouse w/Mouse Pad
- ▲ Sony CDU-33A Internal CD ROM Dual Speed
- ▲ Creative Labs Sound Blaster 16-MCD
- ▲ Pair of AMP Speakers/Sony Headphone
- ▲ Software included: Grolier Multimedia Encyclopedia, The 7th Guest, Mayo Clinic Family Health Book

Only **$1399**

HiQ Jupiter 4DX266 Multimedia

- ▲ Intel 486DX2-66MHz Processor
- ▲ 4MB RAM Expandable to 64MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 420MB IDE Hard Drive
- ▲ 32 Bit VESA Local Bus IDE Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ 32 Bit VESA Local Bus SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 .28 dp, Non-interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Mid Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manuals
- ▲ HIQ Serial Mouse w/Mouse Pad
- ▲ Sony CDU-33A Internal CD ROM Dual Speed
- ▲ Creative Labs Sound Blaster 16-MCD
- ▲ Pair of AMP Speakers/Sony Headphone
- ▲ Software included: Grolier Multimedia Encyclopedia, The 7th Guest, Mayo Clinic Family Health Book

Only **$1799**

HiQ Jupiter 4DX100 Multimedia

- ▲ Intel 486DX4-100MHz Processor
- ▲ 4MB RAM Expandable to 64MB
- ▲ 256K SRAM Cache
- ▲ 1.44MB TEAC Floppy Drive
- ▲ 420MB IDE Hard Drive
- ▲ 32 Bit VESA Local Bus IDE Controller
- ▲ AT I/O Card 2S, 1P and 1G Ports
- ▲ 32 Bit VESA Local Bus SVGA Card w/1MB RAM
- ▲ 14" Color Monitor 1024 x 768 .28 dp, Non-interlaced
- ▲ 101 Enhanced Keyboard
- ▲ Mid Tower Case with 230W PS
- ▲ MS DOS 6.21/WIN 3.11 w/Manuals
- ▲ HIQ Serial Mouse w/Mouse Pad
- ▲ Sony CDU-33A Internal CD ROM Dual Speed
- ▲ Creative Labs Sound Blaster 16-MCD
- ▲ Pair of AMP Speakers/Sony Headphone
- ▲ Software included: Grolier Multimedia Encyclopedia, The 7th Guest, Mayo Clinic Family Health Book

Only **$2139**

Ordering Information: Shipping and handling additional. Corporations rated 32A or better and Government accounts are accepted on a 30 net basis. C.O.D. orders over $500 add $10.00 special handling charges. Fill returns must have prior authorizations from our Customer Service Department (408) 245-5836. Fill returns must be in original packaging and include all warranty cards and manuals. Incomplete product returns, unauthorized returns and refuse shipments are subject to a 20% re-stocking charge. Fill prices and specifications are subject to change without notice. All trademarks belong to their respective companies. Not responsible for typographical errors.

FREE Installation on Every MultiMedia Package!

HiQ New Generation Kit

- NEC CDR510 Triple Speed SCSI CDROM
- Creative Labs SB 16 SCSI Sound Card
- Pair of Amplified Speakers

CD Software Titles Include:

- Grolier Multimedia Encyclopedia
- Mayo Clinic Family Health Book
- The Carmen San Diego

Price $559

HiQ Family Plus Entertainment Kit

- Sony CDU-33A Int CDROM
- Creative Labs SB 16 Mcd Sound Card
- Pair of Amplified Speakers and Free Sony Headphone

CD Software Titles Include:

- Grolier Multimedia Encyclopedia
- The 7th Guest
- Mayo Clinic Family Health Book

Price $309

HiQ Performance Kit

- Toshiba XM 3401B Int SCSI CDROM
- Creative Labs SB 16 SCSI Sound Card
- Pair of Amplified Speakers

CD Software Titles Include:

- Grolier Multimedia Encyclopedia
- Mayo Clinic Family Health Book
- The Carmen San Diego

Price $499

HiQ Family Entertainment Kit

- Sony CDU-33A Int CDROM
- Media Magic 16 Bit Sound Card
- Pair of Amplified Speakers

CD Software Titles Include:

- Arthur Teacher Trouble
- Just Gramma and Me
- The Storytime Vol 1
- Dinosaur Encyclopedia

Price $269

SOUND CARD

Creative Labs SB 16-Basic 16-Bit Stereo, Voice Switch	$99
Creative Labs SB 16-MCD 16-Bit Stereo, Voice Switch	$149
Creative Labs SB 16-ASP MCD 16-Bit Stereo, Voice Switch	$189
Creative Labs SB 16-SCSI 16-Bit Stereo, SCSI CD Interface	$149
Creative Labs SB 16-ASP SCSI II 16-Bit Stereo, SCSI CD Interface	$209

HiQ Cyber Entertainment Kit....$159

- 11 Titles + Creative Lab S.B. 16 MCD
- Joy Stick + Stereo Speakers + Sony Headphones
- The 7th Guest
- Cyber Race
- Game Pack III (D/Generation, Chessmaster 2100, Push-Over, RoboCop 3-D, Paperboy 2, Epic, F-29 Retaliator, Might and Magic, Contraption Zack)

Media Active 80W Built in Amp Speakers	$69
Quickshot 4W Amp Speakers	$15

SCSI/AT Bus CD-ROM DRIVE

CD-ROM Drive only, require SCSI Interface & drivers, for IBM & MAC

NEC 3XI Triple Speed 450KB/Sec, 190ms, internal	$429	External $499
NEC CDR510 Triple Speed 450KB/Sec, internal	$349	
Toshiba XM-3401B 200ms avg. access, 330KB/sec trf 256KB buffer, Photo CD multisession, XA, SCSI-2, internal	$289	External $399
Plextor 3028 240ms avg. access, 300KB/sec, 256KB buffer, Photo CD multisession, internal	$269	
Panasonic CR-562 320ms avg. access, 300KB/sec trf 64KB buffer, Photo CD multisession, XA, internal	$149	
Sony 320ms avg. access, 300KB/sec, 64KB buffer, Photo CD multisession, XA, internal	$139	

(All Card & Kits come complete w/Cables & Drivers)

HOT NEW CD TITLES

20th Century Almanac	$13
20th Century Video-People MPC	$13
20th Century Video-Sports MPC	$13
3-D Dinosaur Encyclopedia Adventure	$15
A Christmas Carol.	$15
A Hard Day's Night (Beatles)	$15
Advance Spelling Tricks MPC (R)	$19
Adventure MPC.	$12
Alphabet Blocks MPC (R)	$17
American Business Phone Book 1993	$12
American Business Phone Book 1994	$19
American in Space MPC	$14
Animals MPC	$12
Aris Jets & Props MPC/MAC	$13
Aris Wild Places DOS/MAC	$10
Aris Wizard MPC/MAC	$10
Aris World View DOS/MAC	$10
Arthur's Teacher Trouble MPC	$12
Atlas Pack • USA/World MAC	$15
Atlas Pack World/USA Ver 3.1/3.01	$10
Audubon Birds MPC/MAC	$11
Audubon Mammals MPC/MAC	$11
Authorware Star MPC	$27
Auto Registery 1994	$15
Basic Spelling Tricks MPC (R)	$19
Battle Chess Enhance MPC	$14
Beauty & Beast MPC	$10
Beginning Reading MPC (R)	$19
Better Home Healthy Cooking MPC/MAC	$14
Beyond the Wall of Stars	$14
Bibles and Religion	$12
Body Works VER.3.0 MPC	$39
Bring the World to your Senses	$10
Busy Town DOS (R)	$26
Carmen San Diego Deluxe DOS	$18
CD Deluxe Pack (Atlas, Chess, Typing)	$14
CD Fun House DOS	$14
CD Game Pack II 10 GamesDOS	$14
Challenge Pack-Games DOS	$14
Chess Master 3000 MPC	$12
Chess Master 4000 Turbo MPC	$14
World Fact Book DOS	$13
CICA MS Window 94'	$13
Clipart Goliath Warehouse	$11
CMC Classic Collection (4-CD)	$19
Colossal Cookbook	$12
Complete Bookshop	$12
Complete House MPC	$12
Compton New Century Ref. Collection MPC	$15
Compton's Interactive Encyclopedia	$29
Conan The Cimmerian	$15
Critical Path DOS	$19
Cyber Race	$18
C.H.A.O.S. Continuum	$12
Day of The Tentacle	$18
Deathstar Arcade Battles	$11
Deluxe Game Pack (4 on 1)	$13
Desert Storm	$12
Dictionaries and Language	$11
Dictionary of the Living World (MPC)	$18
Dinosaur Encyclopedia	$12
Dinosaur Safari	$12
Dinosaur and Space Adventure (DOS)	$15
Dracula Unleashed DOS	$25
Dr's Book of Home Remedies MPC	$14
Dr. Fun Pak	$9
Dr. Games DOS	$9
Dr. Music DOS	$9
Dr. Shareware DOS	$9
Dr. Windows MPC	$9

All CD Titles Sold w/CD Packages Only

DUNE DOS	$21
Early Math MPC (R)	$18
Encyclopedia of Sound	$11
Encyclopedia of Sound Vol.2	$11
Family Choice / Britanniea DOS	$11
Family Doctor-MPC	$22
Family Education 3rd Edition MPC	$11
Family Education Collections DOS	$14
Fatty Bear Fun Pack	$11
Fatty Bear Birthday Surprise	$11
Font Expert	$10
Forever Growing Garden	$18
Gabriel Knight	$18
Game Jamboree	$11
Game Platinum Vol. Ver. 1.0	$10
Game Expert Vol.1 1 MPC	$10
Gardening	$11
Goldilocks & The 3 Bears ENG	$12
Great Cities-Vol.1& 2 DOS	$12
Grolies Encyclopedia MAC	$29
Grolies Encyclopedia 6.0 MPC	$19
Guinness Disk of Record 1993 MAC	$18
Guinness Disk of Record 1993 MPC	$13
Gun Ship 2000	$13
Gus Goes to Cybertown MPC / MAC	$11
Halo Desktop Imager MPC	$12
Ham Radio Ver.3.0	$11
Harry Story Disc & Coloring Book	$13
Hell Cab Ver. 1.1 (R)	$45
HIV•AIDS Resource Guide	$11
Hobbes OS/2 CDROM	$13
Hugo's House of Horrors	$11
INCA DOS	$18
Indiana Jones Fate Atlant	$17
Interactive Storytime Vol.1	$11
Interactive Storytime Vol.2	$11
Interactive Storytime Vol.3	$11
Int'l Business & Econ Atlas DOS	$12
Jokes & Pranks DOS	$10
Jones in the Fast Lane MPC	$11
Journeyman Project MPC (R)	$45
Just Grandma & Me MPC	$13
Jutland DOS	$19
Kid's Zoo / Undersea (2-CD) Titles	$19
King Quest V DOS	$10
King Quest VI DOS	$13
Kodak Photo CD Access MPC	$11
Lands of Lore MPC (R)	$39
Language of the World MPC	$13
Learning Fly Fishing MPC	$15
Library of Future 1st DOS	$29
Loom From Lucas Film DOS	$12
Lord of The Rings DOS	$25
Lotus 123 V3.1 MPC	$39
Macmillan Dictionary for Children MPC	$14
Macromedia Action MPC	$18
Mad Dog McCree	$17
Magic Death: Virtual Murder 2	$14
Mario is Missing Deluxe MPC	$13
Mario's Missing/World Atlas 3.2	$13
Mathematics Library MPC	$11
Mavis Teacher Typing MPC	$12
Mayo Clinic Family Health Book MPC	$13
Media Clips Pack #33, 62, 87 MPC/MAC	$29
Mega Race	$19
Microprose Best Collections DOS/MAC	$15
MIDI Music Shop Professional	$11

Mixed-Up Mother Goose MPC	$10
Monkey Island DOS	$10
Multimedia Mania	$11
Musical Instruments of Symphony Orchestra	$12
Myst MPC (R)	$49
National Parks DOS	$13
Nat'l GEO Mammals DOS	$16
Newsweek Interactive Vol. 1	$13
Newsweek Interactive Vol. 2	$13
Ocean Digital Imagery Vol.1 MPC	$15
Oceans Below MPC	$13
Our Solar System	$11
Parenting	$11
PC-SIG 11th Edition DOS	$11
PC-SIG 13th Edition DOS	$16
Personal Finance	$11
Peter and The Wolf MPC	$10
Phone Disc 94 Bus & Res (R)	$69
Phone Disc 94 Business (R)	$49
Phone Disc 94 Residential (R)	$49
Phone Disc Reverse (5-CD) (R)	$139
Pinacotheca PC Multimedia MPC	$12
Playing w/Languages (English)	$13
Playing w/Languages (French)	$13
Playing w/Languages (German)	$13
Playing w/Languages (Japanese)	$13
Playing w/Languages (Spanish)	$13
Pro Phone: Direct Phone MPC (R)	$79
Pro Phone: Select Phone MPC (R)	$149
Putt Putt Joins The Parade DOS	$11
Q&A Symantec Ver.4.0 DOS	$23
Quantum Gate	$19
Quick Toons DOS	$14
Reader Rabbit Vol.1 MPC (R)	$39
Reader Rabbit Vol.2 MPC (R)	$39
Reader Rabbit Vol.3 MPC (R)	$39
Rebel Assault (R)	$49
Reference Library by STW DOS	$11
Renaissance Masters I MPC	$12
Renaissance Masters II MPC	$14
Return to the Moon	$12
Return to Zork	$14
San Diego Zoo/Animals MPC	$11
Secret Weapon/Luftwaffe DOS	$11
SFX-300 Sound Effects	$10
Sim City 2000 DOS	$19
Sing • A • Long For Children	$11
Sleeping Beauty MPC	$10
So Much Shareware II DOS	$13
So Much Shareware IV	$14
Sound Library MPC	$10
Sound Sensations	$11
Space Adventure MPC (R)	$10
Space Quest IV by Sierra DOS	$12
Space Shuttle MPC	$12
Spirit of Excalibur	$14
Sport's Best (3 in 1) DOS	$13
Sport Illustrated	$13
Star Wars Chess MPC	$13
Stellar Seven DOS	$10
Storis of Murder MPC	$14
Street Atlas USA MPC (R)	$89
Super Toons DOS	$14
Survey of Western Art MPC	$13
Techno Tools	$11
The 7th Guest MPC	$17
The Lawnmower Man MPC (R)	$39
Time Almanac 1992 DOS	$11
Time Table of History (Bus/Pol)	$12
Time Table of History (Sci/Inn)	$12
Too Many Typefonts	$11
Total Baseball DOS/MAC	$11
Travel Companion by Toolworks	$12
Tune Land MPC (R)	$49
U.S. Atlas Ver 4.0 MPC	$11
U.S. History	$14
USA Wars: Civil War DOS/MAC	$19
USA Wars: Korea DOS/MAC	$19
USA Wars: WW II DOS/MAC	$19
USA Wars: Vietnam DOS/MAC	$19
U.S.A. National Park MPC/MAC	$14
Whale of Table MPC	$55
Who Killed Sam Rupert? Virtual Murder 1	$12
Who Shot Johnny Rock? DOS	$35
Willy Beamish-The Adventure	$12
WIN Platinum Vol. 1 Ver. 1.0	$10
Win Superior MPC	$10
Windowars	$11
Windows Expert Vol.1	$10
World Atlas Ver 4.0 MPC	$11
World Cup U.S.A. (Soccer) 1994	$15
World Traveler Vol. 1	$11

HIQ

HIQUALITY SYSTEM, INC.

Call HiQ today!

1-800 827-5836

TELECOMMUTING • BY ROBERT MOSKOWITZ

News From The Telecommuting Front

Telecommuter Leadership

At the recent Telecommuting Advisory Council conference in Tempe, Arizona, there was an interesting presentation by Jaclyn Kostner, a "virtual teams" consultant and author of the intriguing book *Knights of the Tele-Round Table: Third Millennium Leadership*.

Dr. Kostner's point of view is that "teams without walls"—that is, work groups, departments, and project teams that include one or more telecommuters, or that operate from two or more locations—require new paradigms of leadership and control. Until recently, most work groups operated in one location, for one boss, and within one organizational unit. Today, work groups are frequently drawn, ad hoc, from a variety of sites, hierarchies, and organizations. They may include representatives from suppliers, customers, vendors, and government. As a result, old-style leadership methods are not up to the task of managing them effectively.

Old-style leaders could simply call a meeting around a table and know that everyone would be there. They could monitor work by seeing it done. They learned to do all their coaching, giving feedback, handling conflict, spotting and solving problems, empowering, motivating, and other leadership work at one site.

But leaders of today's new "teams without walls" tend to be sitting at their desk all alone. They can't see their people. They can't see the work being done. They can become very uncomfortable if they aren't trained or encouraged to develop a new and more appropriate leadership style.

The biggest difference is that leaders must work much harder to create a higher level of trust: trust between them and their telecommuters, and trust between individual telecommuters and other team-members.

Although we all have some level of trust in the others on our team, in terms of effectiveness, trust is far less important and there can be less of it when everyone works at one site. If a leader calls a telecommuter and hears a television, or children crying in the background, it takes a great deal of trust to feel sure the work is still being accomplished.

Every day per week that the employee works off-site via telecommuting creates an instant annual real estate savings for the employer.

Dr. Kostner says that the most effective telecommuting groups have leaders who consciously develop higher levels of trust within the team. Because meeting electronically is not effective enough at building the necessary level of trust, they regularly create situations to bring people together physically.

"If the distance is convenient," she says, "it's best to do the traveling and have everyone meet once a week. If this would require a couple of hours of travel, or a long commute (say from one end of Los Angeles to the other), then it's enough to meet once a month, and to meet via the 'tele-round table' at least once a week."

For Dr. Kostner, the "tele-round table" is a term that refers to modern electronic capabilities—speakerphones, or other technology for audio and video conferencing—that can bring people together in real time for the free exchange of ideas and information.

With modern telecommunications capabilities that make it convenient and easy to exchange virtually any kind of ideas, information, even documents at the speed of light, you might wonder what purpose would be served by a physical meeting. According to Dr. Kostner, and many others, there's not yet any practical substitute for this means of developing a sufficiently high level of trust within the team.

She counsels that, at these meetings, there should be plenty of informal time for people to talk, have lunch, and do the usual things that help to build social relationships. "It's not good to have every minute organized into formal, agenda-driven activities," she says. "Don't underestimate the importance of informal gatherings."

The lack of such physical meetings, says Dr. Kostner, is the main reason that telecommuters suffer from isolation. Not being able to see people regularly, not being able to reach people at a moment's notice when they need to, getting voice mail instead of a real person (which happens seven out of ten times, according to her research) just does not give telecommuters enough person-to-person contact to be fully satisfying. "People want a certain amount of real-time connections to real people," she points out. Without it, they pine for the social dynamic of working together.

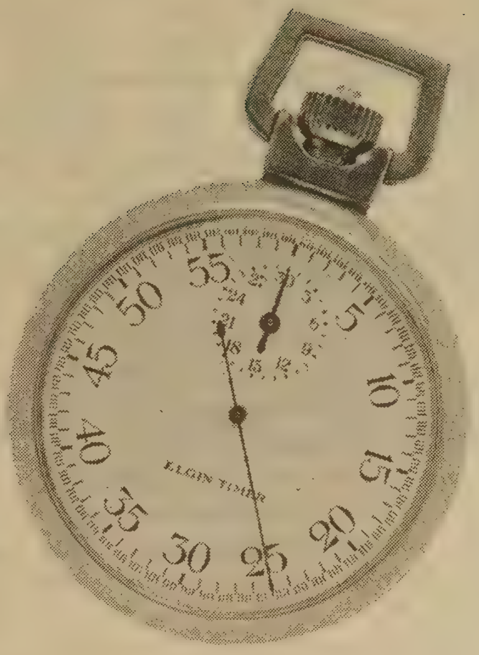
The meetings that everyone attends should also be set up to include a lot of work-related interaction. The leader should avoid doing all the talking, or scheduling one-way presentations for the bulk of the time. Such informational requirements are easily handled by voice mail and email, by sending documents or faxes to everyone on the routing list. Face-to-face meeting time should be used to discuss issues, create ideas, make decisions, and find solutions—as a team.

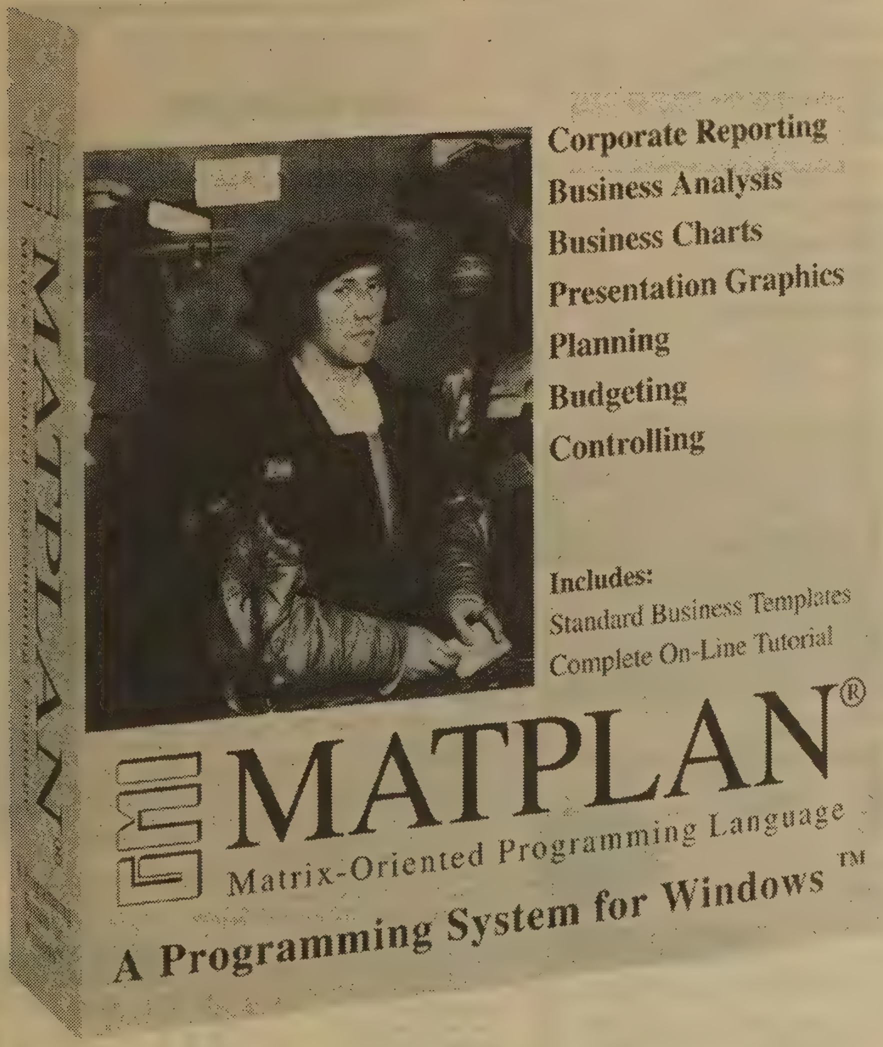
In addition to the regularly scheduled face-to-face meetings, Dr. Kostner offers the following three techniques for building trust within a modern-day "team without walls":

1) Develop a communications plan to make sure everyone on the team stays in the loop. Deal with such issues as: How are we going to handle our voice mail? Should we update our messages every day? How do we indicate that we're leaving a high-priority message for a fellow team-member? How can we get a response that we need urgently?

2) Help team-members who telecommute

Add Up 1000 Spreadsheets in 30 Seconds!


ELGIN TIMER


Corporate Reporting
Business Analysis
Business Charts
Presentation Graphics
Planning
Budgeting
Controlling
Includes:
Standard Business Templates
Complete On-Line Tutorial
MATPLAN®
Matrix-Oriented Programming Language
A Programming System for Windows™
MATPLAN

Major organizations like banks, insurance firms, chemical companies, food distributors, airlines, computer manufacturers and many more have used MATPLAN for their corporate planning, budgeting and reporting.

Now MATPLAN Windows brings this powerful software within your reach.

For a FREE demo version, call GMI today at (415) 855-9484.

Next meeting of the MATPLAN Windows SIG:

Wednesday, September 14th - 6:00 P.M.

Holiday Inn, 625 El Camino Real, Palo Alto

Guests Welcome

"Problems and Solutions of World Wide Integrated Reporting Systems"
Speaker: Dr. Horst Burwick, Founder and Author of MATPLAN.

Subjects of next months:

"How to Implement an Executive Information System with MATPLAN"
Speaker: Mr. Ulrich Teschner, CFO of GMI, Inc. Palo Alto.

"The MATPLAN Project Scheme"
Speaker: Dr. Horst Burwick, Founder and Author of MATPLAN.

MATPLAN is available for WINDOWS, OS/2® and UNIX®, server versions for various UNIX systems and for IBM® mainframes with MVS and DOS/VSE.

GMI

GMI Inc. • 825 San Antonio Road • Suite 208 • Palo Alto, CA • 94303
Tel: (415) 855-9484 • Fax: (415) 855-9485

MATPLAN is a registered trademark of GMI Inc. Windows is a trademark and Excel is a registered trademark of Microsoft Corporation. IBM and OS/2 are registered trademarks of International Business Machines Corporation. All other registered and unregistered trademarks are the sole property of their respective owners. ©1994 GMI Inc.

Telecommuting...*continued*

create an energizing environment at their remote work site. Eventually, every telecommuter may begin to feel the walls caving in on them. There are no hard and fast rules for how to avoid this, but it's important to find a method. In one organization, for example, the telecommuters get together once a week to keep each other motivated and energized. In another organization, remote workers have designated "gatekeepers" at the home office who make a special effort to pass along tidbits of information that might otherwise not get through.

3) Finally, develop and use what Dr. Kostner calls "a decision tool" that taps into people's actions (as contrasted with a "vision" that taps into people's hearts). The decision tool serves to help direct the daily actions of the people working remotely. She says that King Arthur had his knights loyal to the idea of: "Might For Right." More recently, she points out, Ford used a decision tool—"Quality Is Job One"—that was used by managers and front-line employees to drive decisions throughout the Ford organization for many years.

Although teams can develop more elaborate and detailed "decision tools" (one group has formulated seven points for team-members to think about), Dr. Kostner recommends that it's better to have just one concept. It must be created from within the organization, and be a slogan, a motto, a theme, or a concept that can focus and help determine the actions of the people who are operating remotely.

The most effective telecommuting groups have leaders who consciously develop higher levels of trust within the team.

According to Dr. Kostner, telecommuting is truly the new way of work, but it is too great a leap for many leaders to make unless they receive special training. It is certainly possible for leaders of "teams without walls" to be highly effective, but they must do things differently and become more centered on their people. Think of Jean Luc Picard, captain of the starship Enterprise on *Star Trek—The Next Generation.* Surrounded by the highest technology, he is almost totally focused on listening to his people and dealing with their ideas, their needs, and their problems. For Dr. Kostner, Captain Picard is a third-millennium leader in every sense of the word.

For more details on any of this, contact: Jaclyn Kostner, Ph.D., president, Bridge the Distance International, 8378 E. Jamison Circle S., Englewood, CO, 80112-2756, (303)694-9099. Fax: (303)694-9091. She is the author of a best-selling book, *Knights of the Tele-Round Table: Third Millennium Leadership*, which is available in most bookstores.

"Call Following"

A new telephone technology is about to be unveiled. "Call Following" is a system that makes it very easy to manually or automatically redirect calls from one location to another. Already partly implemented in some parts of the nation, it's expected to be rolled out nationwide before the end of 1994.

LOWEST PRICE GUARANTEED!

WE WILL MATCH or BEAT ANY LOCAL ADVERTISED PRICE!!

VLB 486DX-33/DX2-66
VLB & MULTIMEDIA SYSTEM

- -INTEL 486DX/DX2 Processor w/Heat Sink & Fan
- -Built-In 487 Math Co-Processor
- -486VLB MB w/Pentium Socket & 3 VLB Slots
- -256K of Fast-Write Back Cache
- -4 MB of RAM (exp. to 64 MB)
- -Teac 1.2 MB 5 1/4" & 1.44 MB 3 1/2" Floppy Drives
- -CONNER425 MB IDE Hard Drive with Cache
- -32 Bit SPIDER VLB Pro Card w/1MB & IDE I/O (Windows Accelerator, Supports up to 16.7 Mil. true colors)
- -14" SOCOS N.I .28 SVGA Color Monitor (1024x768)
- -101 Chicony Enhanced Keyboard
- -Medium Tower Case w/230W P/S & Digital Display
- -FREE Hi-Resolution 3 Button Mouse w/Pad
- -Panasonic CD-ROM 300KB DS/320ms
- -Sound Blaster 16 Bit Stereo Sound Card
- -Music Software Bundles
- -FREE Multimedia INTER-ACTIVE Encyclopedia
- -Amplified Speakers with AC Adapter 80WATTS
- -CD-PAK w/14 Titles
- -Encyclopedia
- -US Atlas
- -World Atlas
- -The Animals
- -M.B. Typing Teacher
- -Chessmaster

WITH 80 WATT SPEAKERS

SPECIAL

33MHz	66MHz
$ 1395	$ 1425

VLB 486DX/DX2
PRO MULTIMEDIA SYSTEM

- -INTEL 486DX/DX2 Processor w/Heat Sink & Fan
- -Built-In 487 Math Co-Processor
- -GREEN 486VLB MB w/P24T Socket & 3 VLB Slots
- -256K of Fast-Write Back Cache
- -4 MB of RAM w/ 256K Cache (Exp to 64MB)
- -Teac 1.2 MB 5 1/4" & 1.44 MB 3.5" F Drives
- -CONNER 425 MB IDE Hard Drive with Cache
- -32 Bit SPIDER PRO VLB w/1MB RAM & VLB IDE Cont. 2FD/2HD & 2S/1P/1G0 (Windows Accelerator Up To 16.7 Mi. Colors)
- -14" ViewSonic N.I .28 Dig Control SVGA Monitor (1024x768)
- -Mid Tower Case w/230W P/S & Digital Display
- -101 Chicony Enhance Keyboard
- -FREE 3 Button Mouse & Pad
- -SONY 33A Double Speed CD ROM (320KB/300MS)
- -Sound Blaster 16 MCD S. Card w/ Voice Recognition
- -Speakers
- -CD-PAK w/14 Titles
  - -Groiler Encyclopedia, Chessmaster 4000, US Atlas 4.0, World Atlas 4.0, Mavis Beacon Typing Teacher 2.0
- Plus 9 Other Exciting Games

WITH 80 WATT SPEAKERS

SPECIAL

33MHz	66MHz
$ 1505	$ 1545

ADVANCED VLB 486 DX/DX2
& MULTIMEDIA SYSTEM

- -INTEL 486DX/DX2 Processor w/Heat Sink & Fan
- -Built-In 487 Math Co-Processor
- -486VLB MB w/Pentium Socket & 3 VLB Slots
- -256K of Fast-Write Back Cache
- -4 MB of RAM (exp. to 64 MB)
- -Teac 1.2 MB 5 1/4" & 1.44 MB 3 1/2" Floppy Drives
- -420 MB IDE Hard Drive with Cache
- -32 Bit VLB IDE Controller with 2S/1P/1G
- -32 Bit SPIDER VLB PLUS Card w/1MB exp to 2MB (Windows Accelerator, Supports up to 16.7 Mil. true colors)
- -15" ViewSonic 15EX NI .28 SVGA (1280x1024) Monitor
- -Mid-Tower w/230W Power Supply
- -101 Chicony Enhanced Keyboard
- -FREE Z-MIX 3 Button Hi-Resolution Mouse w/Pad
- -Mitsumi CD-ROM 300KB DS/250ms
- -Sound Blaster 16 MCD with voice recognition
- -Amplified Speakers 80 Watts
- -Music Software Bundles
- -CD-PAK w/14 Titles
- -Encyclopedia
- -US Atlas
- -World Atlas
- -M.B. Typing Teacher
- -Chessmaster
- PLUS 9 MORE TITLES

WITH 80 WATT SPEAKERS

SPECIAL

33MHz	66MHz
$ 1665	$ 1705

MEMORY

Item	Price
256K x 9 SIMM	$10
1 MB x 3 SIMM	35
4 MB x 8 SIMM	115
4 MB x 9 SIMM	129
1 MB 72 Pin SIMMs	37
2 MB 72 Pin SIMMs	69
4 MB 72 Pin SIMMs	143
8 MB 72 Pin SIMMs	279
16 MB 72 Pin SIMMs	575

MONITORS

Item	Price
14" SOCOS .28 SVGA	$211
14" SOCOS NI .28 SVGA	222
14" ViewSonic 6E NI .28 SVGA	265
15" ViewSonic 15EX NI .28 SVGA	389
15" ViewSonic 15 NI .27 SVGA	429
17" ViewSonic 17 NI .26 SVGA	889
SPECIAL- 17" ArtScan N .26 SVGA Monitor	$500

SVGA CARDS

Item	Price
Spider VLB w/1 MB Card	$87
Spider VLB Plus w/1 MB Card	93
Spider 256K w/1 MB	119
Spider Black Widow ISA w/1 MB VRAM	139
Spider Black Widow Plus w/1 MB	169
Spider Pro VLB w/1 MB + IDE I/O	98

ALL SYSTEMS
► 2 YEAR LABOR
► 1 YEAR PARTS
WARRANTY

Σ SIGMA-COM
COMPUTER SALES AND SERVICE

2455 AUTUMNVALE DRIVE, STE. #C
SAN JOSE, CA 95131

OPEN MON-FRI 10AM-7PM

Ph: 408-942-4881
TECH: 408-942-4884
FAX: 408-942-4882

Prices Subject To Change w/o Notice & Reflect a Cash Discount
Not Responsible for Typographic Errors

MasterCard VISA

Capitol
880
Montague Exp
Autumnvale
X
Trade Zone
680

BCS★A

BAY COMPUTER SYSTEM OF AMERICA

SERVICE & QUALITY MAKE THE DIFFERENCE!

5 YEARS LABOR & 1 YEAR PARTS WARRANTY ON ALL SYSTEMS

MULTIMEDIA SYSTEM 270MB SVGA System

Intel 486SX/25MHz
4MB RAM 70ns
1.44 Floppy Drive
270 MB Hard Drive
2FD/2HD VL Bus Controller
2S, 1P, 1 Game Port
SVGA Card w/1MB
Discovery 16 CD Kit
101 Enhanced Keyboard
SVGA Monitor (.28 DP 1024X768)
Mini Tower Case w/230 WPS
MS Compatible Mouse

Complete

$1349

VESA LOCAL BUS 486DX-33/DX2-66 MHz

420MB SVGA System

Intel 486 CPU Processor
256K Cache (up to 1MB)
4MB RAM (70ns up to 32 MB)
1.2 & 1.4 Floppy Drives
420 MB IDE HD
VL IDE Controller
2S, 1P, 1 Game Port
VL WIN Accelerator Card w/1MB
SVGA Monitor (.28 DP 1024X768)
101 Enhanced Keyboard
Quality Case w/230 WPS
MS Compatible Mouse

Complete

$1275/$1319

SUPER PENTIUM 90MHz POWER!!

16MB, 540MB SVGA SYSTEM

Pentium 90MHz Processor PCI BUS
16MB RAM 70ns Expandable
540MB Hard Drive
1.44 Floppy Drive
Orchid Kelvin SVGA Card w/1MB
SVGA NI Monitor .28DP
2 S, 1P, 1 Game Port
Full Tower Case w/250 WPS
101 Keyboard
MS Compatible Mouse

Complete

$2739

MULTIMEDIA

Sound Blaster Pro Basic	$85
Sound Blaster 16 SCSI II	155
Sound Blaster MCD 16	145
Discovery CD-16 Kit	349
Pro Audio Spectrum 16	109
NEC Triple Speed CD-ROM	385
Mitsumi Double Speed CD ROM Drive	155
Texel Double Speed CD-ROM	299
Toshiba Double Speed CD-ROM	299
Trantor SCSI Controller	55
Labtec Stereo Speakers	from 20

NOTEBOOKS

MONO	
486SLC-33 4MB	$1195
DUAL SCAN	
486DX-33/66 4MB	2175/2250
NEC UltraLite	CALL
Toshiba	CALL
Texas Instruments Travelmate	CALL

CASES

Mini Tower Case w/230 PS	$50
Baby AT Case w/230 PS	53
Mid Tower w/230 PS	69
Big Tower w/250 PS	89

VIDEO OPTIONS

MGP Card	$17
Trident 8900 w/1M	65
Tseng ET 4000 w/1M	85
Paradise w/1M	85
Diamond Speedstar Pro ISA/VL	110
Diamond Stealth 64/2MB	349
Diamond Stealth 24 ISA/VL	150
Diamond Viper VL w/2M	359
ATI Ultra Pro w/2M	349

KEYBOARDS

Maxi Nova 101	$28
Maxi Switch 101	39
Keytronic 101	39
Focus 9000	57
Focus 2001	39
Chicony 101 w/Trackball	59

HARD DRIVES

270MB Hard Drive	$205
340MB Hard Drive	229
420MB Hard Drive	245
540MB HD	339
1.0GB	699
1.75GB	1050

CALL FOR OTHER DRIVES

MONITORS

MAG DX 15	$439
MAG DX17F	739
Amber 14"	95
VGA Mono	119
SVGA 1024x768 .28DP	240
SVGA NI 1024x768 .28DP	265
ADI 4GP	430
KEC 2V 14"	360
NEC 3FGe	620
NEC 4FGe 15"	699
Viewsonic 17G	845
Nanao F550i	919

CONTROLLER CARDS

IDE Controller 2FD/2HD	$17
IDE I/O Controller	20
VL IDE I/O Controller	28
Adaptec 2842VL/Kit	265

MOTHERBOARDS

386-33SX	$79
386-40DX W/128K CACHE	99
486-33/66DX/VL	365/410
486-25 SX	145

SOFTWARE/CD TITLES

MS Works	$89
Turbo Tax	40
Quickbook	99

Call for other titles

MOUSE

3-Button Mouse	$12
Logitech 2-Button	22
Logitech Mouseman/Bus	55/59
Logitech Trackman	79
MS Mouse/Bus	39/69
Qtronic Trackball	39
Kensington Expert Mouse	99

MISC.

Intel 14.4 Fax Modem	$125
Colorado Trakker	325
Various Cables/Adapters	CALL
Heat Sink w/Fan	10
Printer Auto Switch	19
Joystick	from 15

THIS MONTH'S SPECIALS!

ALL IN ONE NETWORK CARD	$57
COLORADO 250MB TAPE BACKUP	$165
SMC ELITE COMBO	$95
SUPRA14.4 FAX/MODEM	$95
101 KEYBOARD	$20
HAYES ACCURA 14.4 FAX/MODEM	$125

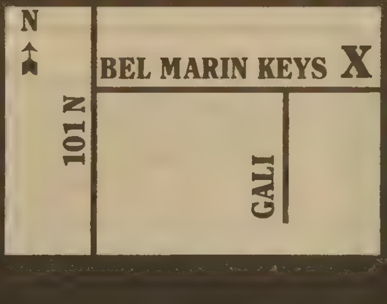
BCS★A

COMPUTERS

Tel: (415) 382-1BCS
(415) 883-7392
Fax: (415) 883-8104

385 Bel Marin Keys Blvd, Novato, CA 94949
Hours: M-F 10:00am-6:00pm • SAT 11:00am-4:00pm

MasterCard VISA



*Dealer Inquires Welcome • *Volume Discount Available • *Price subject to change w/o notice • *Trademarks are registered by respective companies

BEST PRICE & QUALITY IN TOWN! (408)734-9386

TOP DATA MONTHLY SPECIALS

SYSTEM	M/B +CPU	BASIC SYSTEM	BASIC SYS 120MB HDD 14" MONO	BASIC SYS 120MB HDD 14" MONO VGA	BASIC SYS 120MB HDD 14" SVGA	BASIC SYS 170MB HDD 14" SVGA	BASIC SYS [illegible] HDD 14" SVGA	BASIC SYS [illegible] HDD 14" SVGA	BASIC SYS [illegible] HDD 14" SVGA
Pentium 90C PCI	1,109	1,269	1,519	1,559	1,679	1,739	1,799	1,859	1,919
Pentium-66C PCI w/scsi ctr	809	969	1,219	1,259	1,379	1,439	1,499	1,559	1,619
Pentium 66C VLB	669	829	1,079	1,119	1,239	1,299	1,359	1,419	1,479
486DX4-100C PCI w/scsi ctr	739	899	1,149	1,189	1,309	1,369	1,429	1,489	1,549
486DX4-100C VLB	619	779	1,029	1,069	1,189	1,249	1,309	1,369	1,429
486DX2-66C VLB DX4 Upgrdble	269	429	679	719	839	899	959	1,019	1,079
486DX50C VLB	269	429	679	719	839	899	959	1,019	1,079
486DX40C VLB	189	349	599	639	759	819	879	939	999
486DX33C VLB	179	339	589	629	749	809	869	929	989
486DLC40C VLB 87DX40Inc'd	159	319	569	609	729	789	849	909	969
486SLC66C VLB	239	399	649	689	809	869	929	989	1,049
3/486DX33C VLB 486 Upgdbl	109	269	519	559	679	739	799	859	919
486DX2-66C EISA VLB	479	639	889	929	1,049	1,109	1,169	1,229	1,289
486DX2-66C ISA	259	419	669	709	829	889	949	1,009	1,069
486DX50C ISA	259	419	669	709	829	889	949	1,009	1,069
486DX2-50C ISA	229	389	639	679	799	859	919	979	1,039
486DX40C ISA	179	339	589	629	749	809	869	929	989
486DX33C ISA	169	329	579	619	739	799	859	919	979
486SX40 ISA	149	309	559	599	719	779	839	899	959
486SX33 ISA	119	279	529	569	689	749	809	869	929
486SX25 ISA	109	269	519	559	679	739	799	859	919
486DLC40C ISA 87DX40Inc'd	149	309	559	599	719	779	839	899	959
486SLC33 ISA	89	249	499	539	659	719	779	839	899
386DX33/64C ISA	79	239	489	529	649	709	769	829	889
386SX40 ISA	59	219	469	509	629	689	749	809	869

BASIC SYSTEM: MB W/CPU, 1MB MEMORY, SUPER IDE, 1.44MB FD, MINI TOWER W/230W PS & KEYBOARD.

MONITORS

CTX
- 14" .28I/1451 .28NI...............229/239
- 15" 1562GM.................................369
- 17" 1760LR/1765LRG...........629/696

KANAKA-Edge to Edge Display
- 14" .28I/.28NI.......................239/269
- 15" FM590 .28 1280NI................349

KFC
- 14" .39I/.28I/.28NI...........199/229/249
- 15" 1511/1507w/digital 349/389

MAG
- 15", MX/DF15F.....................469/399
- 17", MS/MX/DS 17F........899/859/719

NANAO
- 15", F340IW, 1024X768 72Hz..... 659
- 17", F550IW, 1280 .28, 75Hz.......939
- 17", T560I, 1280X1024, .26.......1,419
- 17", T560IW 1280 .26................1,179
- 20", T660I, 1280X1024, .31.......2,119
- 21", F760IW, 1280X1024 .31.....1,899

NEC
- 15", 3V/4FGe.........................459/609
- 17", 5FGe/5FGp..................959/1089

VIEWSONIC
- 14", 4E/6E/14E................259/269/309
- 15", 15E/15EX/15............359/379/419
- 17", 17/17E/17G.............919/729/769

VIDEO CARDS

SVGA -256K/512K/1MB........... 29/49/69

ATI Graphics

Pro Turbo-Mach 64 Engine
- 2MB-DRAM PCI/VLB/ISA..............279
- 2MB-VRAM PCI/VLB/ISA...............439
- 4MB-VRAM PCI/VLB/ISA...............659

Ultra Pro
- 1MB-DRAM VLB/ISA-------------------149
- 2MB-DRAM PCI/VLB/ISA..259/199/199
- 4MB-VRAM PCI/VLB/ISA...............359

Ultra Plus 2MB DRAM..................199

Wonder 1MB DRAM.......................149

VGA 1024 1MB DRAM VLB.......... 129

CIRRUS LOGIC
- 5428 1MB/2MB VLB.................109/159

DIAMOND

SpeedStar PRO 1MB/64.........99/Call

Stealth
- 24/32 1mb/32 1mb/32 2mb.129/169/219
- PRO 1MB/PRO 2MB.................219/299
- 64 1MB/64 2MB.........................Call/Call

Viper 2MB/PRO 4MB VRAM....309/Call

ORCHID
- CELSIUS 1MB/2MB VLB..........129/179
- KELVIN 1MB/2MB PCI/VLB......149/189

TSENG LAB
- ET4000AX 1MB VLB........................ 99
- ET4000W32 1MB ISA/VLB.........89/129

NETWORKING

ARTISOFT STARTER KIT
- LANtastic AI 5.0 Operating System x2
- NE2000 Ethernet Card x2
- RG58 Coax Cable x1,
- For Windows/Dos............................299

NETWARE LITE STARTER KIT
- Netware Lite Operating System x2
- NE2000 Ethernet Card x2
- RG58 Coax Cable x1........................179

PERSONAL NETWARE KIT 279

NETWARE 2.20/3.12/4.01 PLS CALL

RISC PC

MIPS R4400PC 135MHz 64-Bit RISC Pro
8KB Instruction cache/8KB data cache
512KB Secondary cache(upto 2Mb)
64-bit Fast Burst Video Bus(200MB/sec)
8MB memory (upto 256MB)
500MB SCSI HD
Integrated SCSI II contlr on 64-bit I/O bus
Built-in 32-bit Ethernet on 64-bit I/O bus
Five ISA expansion slots for ISA adapter
Microsoft Windows NT Operating System
Run all your application software for PC

ONLY $3599

MULTIMEDIA

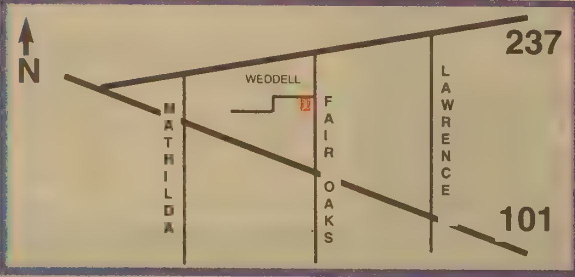
CD-ROM
- Mitsumi SS/DS.............................99/139
- Panasonic CR562 DS.......................149
- Philips CM205 SS..............................89
- Sony 31A SS/33A DS................119/149
- Nec 3Xi/3Xe..............................339/469
- Plextor 3028 Int./5028 Ext..........269/349
- Toshiba 3401B Int./Ext..............299/359

CREATIVE LAB
- OMNI CD/GAME BLASTER......199/389
- DISCOVERY CD 8/16...............269/319
- EDUTAIMENT CD 16.......................389
- DIGITALEDGE CD............................649

Sound Blaster
- PRO DELUXE...................................89
- 16 Multi CD/w ASP.....................119/169
- 16 SCSI/w ASP..........................169/209

CONTROLLERS

- IDE 2FD/HD with 2S1P1G.....................16
- IDE Cache Controller(0K).......................79
- IDE VLB 2FD/2HD with 2S1P1G...........36
- IDE Co-exist work w/MFM, RLL etc.......39
- Promise 420VLB/4030VL...............99/109
- Forex SCSI VLB Bus Master...............159
- Adaptec 1542CF ISA/2742 EISA.169/359
- Adaptec 2842VL/2940 PCI.........289/319



TOP DATA

To Order Call:
(408)734-9[illegible]

Information/Int'l Call: [illegible]
Service/Tech. Support M-F [illegible]
[illegible]
574 [illegible]
Hours: M-F 9am-[illegible]

TERMS AND CONDITIONS

1. One year parts and labor warranty.
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]

Telecommuting...*continued*

The main advantage of call following is that people need to know only a single telephone number to find you, wherever you are. The switching equipment takes care of routing the call according to parameters you set up. For example, calls to your number will be forwarded automatically to your cellular telephone, provided it is turned on. When you turn it off, calls to the same number will now be forwarded to another location, perhaps your home, or your office.

Call following can make it possible to funnel all your calls to a single answering machine or voice mail system, or even to a pager. Depending on how it is implemented, you may also be able to create and program special dialing codes, which you give out selectively to special people. By dialing the proper code at the time they call you, your callers may be able to have the calls billed to you instead of paying for it themselves, or to have calls put through to your cellular or home phone, while those who don't dial the right code get only your voice mail system.

Parts of this service are presently available (for numbers with an area code of 700), and people have been very receptive to this new level of convenience and simplicity, despite the added cost. Now AT&T, MCI, Sprint, and other providers will be creating a totally cooperative telecommunications system that can let calls to a single number follow you anywhere around the nation (and within a few years, anywhere around the world). These new "500" numbers are expected to cost about $10 to $15 per month.

For telecommuters, this is a chance to make the precise location from which you are working totally invisible to the outside world. No one who calls you ever needs to know (or care about) your schedule, or where you can be found on certain days.

On a personal level, the new "500" service brings up the possibility of having a single telephone number from birth to death. We'll give each child a number, and will always be able to call them. With this system in place, you need never lose touch with your high school friends, even if they move to the Amazon!

Watch your local newspapers and TV for more information on this "500" service, and as always I'll keep you posted on new developments.

Telecommuting Financials

People have long been advocating telecommuting as a way to improve productivity and morale, to attract and keep desirable employees, and to make a business more flexible and responsive. But a few financially oriented souls have also been advocating telecommuting as a way to improve a company's bottom line.

According to one analyst, when a corporation buys a building or signs a lease, that's a financial commitment to be carried on the books as a liability. Since telecommuting reduces the amount of office space a corporation requires to support a given number of employees, it can be factored into the real estate equation to reduce that liability. The dollars saved fall directly to the company's bottom line.

Here's one analysis of how this can work:

Assume that a typical employee requires 250 sq. ft. of office space, which includes a

Representative list of CNE seminar & network training attendees:
☑ 1st Trust Savings Bank
☑ AAxiom Group
☑ Aetna Life & Casualty
☑ ALCOA - Lebanon, Pa.
☑ ARTI
☑ BioSystems Analysis, Inc.
☑ Burr, Pilger & Mayer
☑ Cellular One - McAllen, Tx.
☑ Chevron - Houston, Tx.
☑ Chase Manhattan Bank
☑ CompuSystems
☑ Delta Systems
☑ E-Systems - Dallas, Tx.
☑ Entré Computer
☑ ETR, Inc. - Princeton, N.J.
☑ Ferris State Univ.
☑ Fidelity Federal Bank
☑ FoxBerry Group
☑ HealthNet
☑ Hermann Hospital
☑ H.S. Fox Corp.
☑ Impact Computer Service
☑ Integra System
☑ JVN - Houston, Tx.
☑ K.D. Enterprises
☑ Kirby Company
☑ L.A. Housing Authority
☑ Lehigh University
☑ Loyola University
☑ Minds - Over - Matter
☑ Navy Computer & Tel-Com Station - San Diego, Ca.
☑ Odessa Engineering
☑ Oregon Economic Dev.
☑ Texaco - Houston, Tx.
☑ U.C. Hastings College
☑ US Bankcorp
☑ U.S.M.C. - Monterey, Ca.
☑ Xerox - Irvine, Ca.
Call for reference letters and extensive information kit!!

Network Career Professionals Facts and Statistics:

◆

"With companies such as Shearson Lehman Brothers Inc. and Sears, Roebuck & Co. now requiring their networking professionals to be CNEs ..."

LanTimes - Nov. 15, 1993

For Experienced Network Professionals desiring CNE™ (Certified NetWare Engineer) certification in the least amount of time, do what over 1,000 of your peers have done and attend a Jones Communications' F.A.S.T. 2 day CNE™ workshop!!! Call for exact dates and locations.

For Computer Professionals desiring the finest hands-on Novell network administration and installation experience, attend the Jones Communications' 8-week program (San Jose & Irvine locations) which leads up to both CNE™ & ECNE certification.

JONES COMMUNICATIONS
800-833-3263 Voice ◆ 800-833-1263 Fax ◆ cjones@jonesnet.com
The Network Interface Board B.B.S. at 408-648-1263
"...possibly one of the best network support boards in the country!"

" A student with no technical expertise can, on average, get a job with a starting salary of $35k.. CNEs with some technical background & experience will pull in anywhere between $52k-70k."

LanTimes - Nov. 15, 1993

"There is no industry positioned for better growth, higher job security or above average salary than that of a networking professional ... and Novell and their CNEs currently support 70% of the worldwide market."

At only $895 (for any 2 days), there is no better value anywhere for instructor led training!

Even after comparison to "similar" courses offered in home study format, we remain the most cost effective solution due to our success rate & one year free audit policy.

☑ **The Service & Support test** will become a 3-hour, CD-ROM based test on Oct. 17, 1994. If you or your company anticipate the need for CNE status, it would be a good idea to get this requirement out of the way now!

At only $2,995.00, not only is this course value priced far beneath the "competition" but goes to a depth of test preparation and real-world network integration that can only be provided by true CNEs. Day, night & weekend classes available . Fall classes in San Jose & Irvine commence on Monday , October 17th.

Financing available with Visa, MasterCard, American Express, Discover and 100% consumer financing with prior approval.

◆

Free job placement assistance available upon graduation!

Private seminars also available for groups of 5 or more. Customized training also available.

Workshop Modules
Core Courses - Day 1
- Networking Technologies
- **Only $395.00!** (Morning)
- Dos/Micro. Concepts
- Service & Support
- **Only $295.00!** (Afternoon)

NetWare v3.12 - Day 2
- v3.12 System Manager
- v3.12 Adv. System Mgr
- v3.12 Installation & Configuration Workshop
- NetWare Printing
- **Only $495.00.**

NetWare 4.x - Day 3
(4.x demonstration server in class)
- 4.x System Manager
- 4.x Advanced System Mgr.
- 4.x Installation Workshop
- v3.11 to 4.0 Update
- **Only $495.00!**

These workshops can be taken separately or combined for the incredible low price of only $895 for any 2 days!

◆

☑ **Free BBS Access** (408-648-1263) to hundreds of megabytes of Novell patches & fixes as well as global NetWare chat via our Internet connection at jonesnet.com.

☑ **Special Bonus!** CNEs receive from Novell a free issue of the $1,395 NetWare Support Encyclopedia CD-ROM and 2 free Novell support calls (a $300 value) with each additional call 50% off.

proportional share of common areas, bathrooms, and so forth. If rentals are $2 per square foot per month, and overhead (including furniture, cleaning, utilities, security, and the like) is only 50% of the rental cost, then each square foot of office space costs the company $36 per year. This means an employee who is on-site full time costs the company about $9000 per year.

Every day per week that the employee works off-site via telecommuting creates an instant annual real estate savings for the employer of about $1800. In a corporation with dozens, or hundreds, or thousands of employees, the benefits can add up very fast.

Telework '94 (#1)

Telework '94 is the name of the first Canadian symposium on telecommuting, scheduled for Toronto in November. It's sponsored by a group of Canadian public and private organizations; and should attract more than four hundred experts and interested parties from several nations.

Topics to be addressed at Telework '94 in Toronto include: human resources and other operational issues surrounding telecommuting, the potential impact of large-scale telecommuting on urban environments; and the organizational risks, costs, and benefits of telecommuting.

For more information, contact: Henriette Gravelle, Coordinating Committee, Telework '94, 300 Laurier Ave. W., L'Esplanade Laurier (3rd Floor, West Tower), Ottawa, K1A 0R5, CANADA. Or call her at: (613)941-0288. Fax: (613)952-8100.

Telework '94 (#2)

Telework '94—New Ways to Work is also the name of a European conference on teleworking scheduled for November 3rd and 4th, 1994, and sponsored by the City of Berlin, Germany, in association with the European Community Telework Forum, the European Community COPERNICUS actions for Central and Eastern Europe, and COST Telecommunications.

It will bring together Eastern and Western European politicians, policy makers, industrialists, union representatives, telework pioneers, and researchers.

Topics include: the economic and social potential, as well as the organizational implications, of telework and flexible working; the challenge of new ways to work for Europe; the technological basis for telework and other new ways to work; the constraints on trans-border telework; and development of an agenda and action plan to promote telework and other flexible work arrangements.

The conference will be held in conjunction with an exhibition of technical and organizational methods relating to telework; a meeting of the European Inter-Parliamentary Interest Group on telework; and a meeting of the Steering Group for COPERNICUS telework projects.

For more information, contact: FOKUS bvba, Lange Leestraat 268, B 2018 Antwerpen, BELGIUM. Phone: 32-3-2-30-20-56; fax: 32-3-2-18-46-76; Email: 100013,3347@Compuserve.com ■

Copyright © 1994 by Robert Moskowitz. All rights reserved.

We know your NOVELL training is important to you.

Novell Authorized Education Center

And we are listening...

YOU ASKED FOR

- ☐ The very best instructors
- ☐ Quality customer service
- ☐ CNE, ECNE, and CNA programs
- ☐ Daytime, evening, and weekend classes
- ☐ State-of-the-art equipment and facilities

AND CLARITY TECHNOLOGIES HEARD YOU

- ☑ Clarity insturctors are highly rated Certified NetWare Instructors with ***extensive field experience.***
- ☑ Clarity provides ***each student*** with their own Education Counselor to guide and support them in achieving their individual training needs.
- ☑ Clarity ***offers all*** Certified NetWare Engineer, Enterprise Certified NetWare Engineer, and Certified NetWare Administrator programs.
- ☑ Clarity was ***the first NAEC*** in the Bay Area to offer the CNEvening. Now offering ***Weekend CNE*** programs!
- ☑ Clarity offers the highest quality training facilities including ***one PC per student, separate classrooms and labs.***
- ☑ Clarity ***now offers*** financing for your CNE, ECNE, and CNA training.

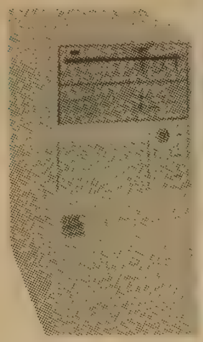
Interested in NetWare Programming?
Clarity Technologies now offers the
Novell Developer Education courses... call for details.

CLARITY
TECHNOLOGIES
1-800-729-9995

FREE
CNE Orientations
August 31
in San Francisco
September 13
in San Jose
September 21
in Walnut Creek
Space is limited!
1-800-726-9995

JDR Microdevices®

Mini Upright Case



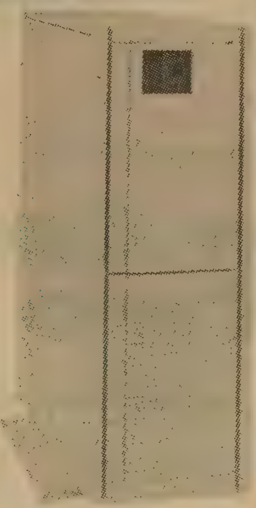
- Five (5) Drive Bays
- Flip-down M/B tray
- Includes mounting hardware & manual

$\$49^{95}$

230 Watt Power Supply......$\$49^{95}$

JDR Microdevices®

Super Upright Case

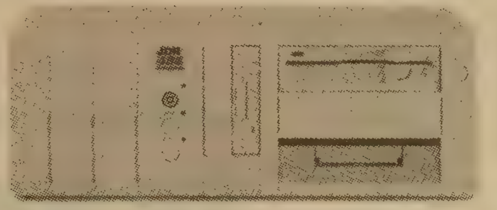


- Eleven Drive Bays
- CPU Speed LED Incl. mounting hardware/manual

$\$199^{95}$

250 Watt Power Supply......$\$59^{95}$

JDR Microdevices®



Desktop Case

- Seven (7) Disk Drive Bays
- Compact, expandable design
- Incl. mounting hdw. & manual

$\$39^{95}$

230 Watt Power Supply......$\$49^{95}$

MODULAR CIRCUIT TECHNOLOGY

Motherboards

66MHz i486DX2 VESA Local-Bus Motherboard with two VL-Bus slots, 128Kb External Cache, AMI BIOS and manual	$\$399^{95}$
66MHz Pentium Processor-based Motherboard with four PCI-Bus slots, 256Kb External Cache, AMI BIOS and complete documentation	$\$999^{95}$
90MHz Pentium Processor-based Motherboard with four PCI-Bus slots, two VL-Bus slots, 256Kb External Cache, AMI BIOS & complete docs	$\$1199^{95}$

SIMM Memory

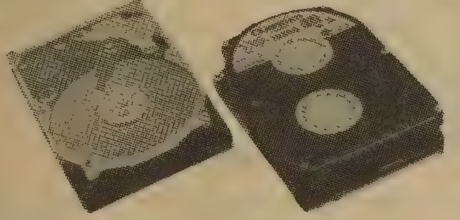
1 Megabyte, 70ns, 3-chip	$\$39^{95}$
4 Megabyte, 70ns, 9-chip	$\$149^{95}$
4 Megabyte, 70ns, 72-pin	$\$159^{95}$
16 Megabyte, 70ns, 72-pin	$\$599^{95}$
32K x 8, 20ns, 28-pin DIP	$\$3^{95}$

Bring In This Ad To Our Bascom Ave. Location Only To Receive These Prices!!!

TEAC

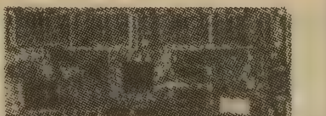
Teac 5.25" 1.2 Megabyte High-Density Floppy Drive	$\$49^{95}$
Teac 3.5" 1.44 Megabyte High-Density Floppy Drive	$\$39^{95}$
Toshiba 3.5" 2.88 Megabyte Extra-Density Floppy Drive	$\$69^{95}$
Conner 250 Megabyte Int. Tape Drive with FREE tape	$\$149^{95}$
Colorado 250 Megabyte Int. Tape Drive with software	$\$159^{95}$
Colorado JumboTRAKKER 250MB LPT-driven tape drive	$\$319^{95}$

Seagate



ST-3145A	IDE, 131Mb, 16ms	$\$179^{95}$
ST-3290A	IDE, 261Mb, 16ms	$\$199^{95}$
ST-3391A	IDE, 341Mb, 14ms	$\$229^{95}$
ST-3491A	IDE, 426Mb, 14ms	$\$249^{95}$
ST-5660A	IDE, 528Mb, 12ms	$\$349^{95}$
ST-5660N	Fast SCSI-2, 528Mb	$\$399^{95}$
ST-31200N	Fast SCSI-2, 1Gb	$\$699^{95}$
ST-12400N	Fast SCSI-2, 2Gb	$\$1299^{95}$
ST-12550N	Fast SCSI-2, 2.1Gb	$\$1499^{95}$

DIAMOND
Computer Systems, Inc.

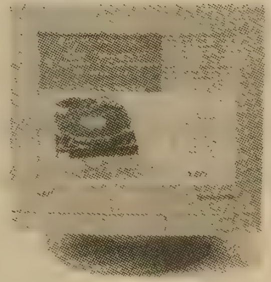


SpeedStar 64 PCI with 1 Megabyte of DRAM and software drivers for Windows, AutoCAD & more	$\$199^{95}$
Stealth 32 VLB with 2 Megabytes of DRAM and software drivers for Windows, AutoCAD & more	$\$249^{95}$
Stealth 64 VLB* with 2 Megabytes of VRAM and software drivers for Windows, AutoCAD & more	$\$349^{95}$

JDR's Catalog Outlet carries a full line of Diamond Graphics Accelerators. Please call us for cards not in this listing.

ADI

NEC

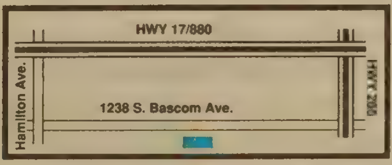


ADI 3E - 14" 1024x768	$\$299^{95}$
ADI 4G - 15" 1280x1024	$\$399^{95}$
ADI 5A - 17" 1280x1024	$\$729^{95}$
NEC 3FGe - 15" 1024x768	$\$599^{95}$
NEC 4FGe - 15" 1024x768	$\$629^{95}$
NEC 5FGe - 17" 1024x768	$\$999^{95}$
NEC 5FGp - 17" 1280x1024	$\$1099^{95}$
NEC 6FGp - 21" 1280x1024	$\$1999^{95}$

Serving you since 1979

JDR Microdevices®
CATALOG OUTLET

1238 South Bascom Avenue
San Jose, CA 95128 408-280-7144 Fax: 408-947-8234



Prices good through 9/29/94 at this location only. We are not responsible for typographical errors. Prices are subject to change without notice. All merchandise subject to prior sale. Items pictured may only be representative. All trademarks are the property of their respective owners.

VISA MasterCard AMERICAN EXPRESS DISCOVER

Outlet Hours:
Monday-Friday - 9:00am-7:00pm
Saturday - 9:00am-5:00pm
Sunday - 12:00pm-4:00pm

INTERNET • BY JOHN S. QUARTERMAN, GRETCHEN K. PHILLIPS, AND SMOOT CARL-MITCHELL

Seven Conferences In Two Months

An Internet Travelogue

Online communications lead to in-person communications, often at conferences. Some of the most important communications at conferences are not the presentations, but rather the hall talk.

With so many conferences related to networking these days, it's useful to characterize some of them a bit to make it easier to decide which to attend. At all of them, presentations tend to be divided between advocates and more cautious powers-of-other-kinds-that-be. Not only do you see the same presentations at different events; many of them are by the same presenters.

Finally, getting Internet access at a conference used to be difficult, but is now expected. Access during a presentation to show live demos used to be unheard of, but is becoming common. Let's illustrate these points by some anecdotes from our summer of conferences.

The sight of hackers in jeans and marketing people in suits, all earnestly discussing the pros and cons of ATM, IPNG, OSPF, while walking obliviously through a sea of one-armed video bandits and past the petrified Elvis in the Hilton lobby, was worth the trip in itself.

Las Vegas (May 2–6)

InterOp+NetWorld was small by Las Vegas standards; only ninety thousand people wandered through the trade show. But there are probably only three places in North America for a conference of that size: Las Vegas, Atlanta (site of InterOp+NetWorld September 1994), and Chicago.

The sight of hackers in jeans and marketing people in suits, all earnestly discussing the pros and cons of ATM, IPNG, OSPF, while walking obliviously through a sea of one-armed video bandits and past the petrified Elvis in the Hilton lobby, was worth the trip in itself. It would be interesting to know how many people gambled and what the win ratio was, compared to, oh, the Tailhook convention held in the same hotel in a previous year. Are hackers as austere as they sometimes seem? Or did everybody try every game, just to see how to hack it? And did they succeed?

The trade show itself had booths by just about every company that sells hardware or software related to networking, whether IP, NetWare, or sneakernet. Paid actors disguising canned talks as entertainment were more numerous this year. Cute freebies required sitting through one or more such talks more than in previous years.

Were there any big technical or business announcements at the show? Probably, but the main idea was as usual to indulge in maximum schmoozing. If you want to see working examples of current products in networking, InterOp is the place for you. Most of you won't even have to leave your continent: there was one in Germany in June, and one in Tokyo in July.

There were two kinds of tutorials this year: the traditional two-day ones, and one-day workshops. Smoot and John gave one of the latter on connecting to the Internet, using our recent book, *The Internet Connection*, as a textbook.

Our main impression of InterOp audiences is that the IP vs. NetWare mix of backgrounds created when InterOp (or Ziff-Davis) bought NetWorld is still unsettled, so you have to be very careful to tune your workshop description to emphasize prerequisites, such as knowing what Class A, B, and C IP addresses are. Otherwise, it's easy to have half the class bored and the other half over their heads. Also, InterOp audiences want their tutorials to march right along and to match the tutorial notes very closely. They like to ask questions, but they don't like digressions.

The conference part of InterOp was about the same as usual. This isn't a peer-reviewed academic conference; it's an extension of the Internet good-old-boy network. Some of the old boys and girls get appointed to run sessions, and they pick speakers from people they know, personally or by technical reputation. This usually works quite well in presenting technical and contextual information to an exponentially expanding audience of newcomers to networking, or to the exploding plethora of related subtopics.

There were also the usual product presentations, Birds of a Feather (BoF) meetings, hospitality suites, shownet, scattered terminal clusters (but no printing), InterOp TV, and other goings-on.

One of the biggest benefits of InterOp isn't the scheduled events. It's being able to find so many network participants all in the same place, schmoozing. One of the biggest disadvantages of InterOp is it's so big that unless you're already scheduled to meet someone, it's hard to find them. Such are the dangers of success...

Las Vegas has the World's Biggest of lots of things, and a full-size pyramid with a full-size sphinx. Its previous reputations of tacky and shady seem to be giving way to something that Disney and San Francisco should perhaps be worried about.

Austin (May 9–10)

Making Money on the Internet. Smoot thought of the title, Professor Andrew Whinston was the organizational focus, and 125 people came to this conference, which was supposed to be limited to one hundred people.

It was cosponsored by the Center for Information Systems Management, School of Business Administration of the University of Texas at Austin, Texas Internet Consulting (TIC), Bunyip, RGK Foundation, and the University of Texas at Austin's IC2 Foundation.

Think of it as TIC's old boy network conference. We had Brewster Kahle for WAIS, Peter Deutsch for Bunyip and archie, Tom Stone for Addison-Wesley, and James Michener for literature.

Coming Soon
To Walnut Creek!

A & A TECHNOLOGY, INC.

47000 WARMSPRINGS BLVD., STE. 8
FREMONT, CA 94539
PHONE: 800-226-8654 OR 510-226-8650
FAX: 510-226-8652

WE WILL MEET ANY ADVERTISED PRICE ON HP & COMPAQ IN THE BAY AREA!

"COMPAQ IS COMPLETE"

CALL FOR MEMORY

BUY RENT & LEASE

CONTURA AERO

486 4S/25 84HD	$1049
486 4S/25 170HD	1459
486 4S/33C 170HD	1999
486 4S/33C 250HD	2299

LTE LITE

486 4/25 120HD	2099
486 4/25E 120HD	2829
486 4/25 209HD	2395

CONCERTO

486 4/25 120HD	$1269
486 4/33 250HD	1469

PROLINEA

486 S/25 EN	$1009
486 S/25 EN 100HD	1219
486 S/25 200TR	1319
486 S/33 340HD	1399

DESKPROS

486 4S/33 340HD	$1359

CALL FOR MEMORY UPGRADES & OTHER MODELS

AUTHORIZED DEALER, 3 YEAR WARRANTY

HOT DEALS-WHILE SUPPLIES LAST-CALL NOW

With Toner and Case!

HP LASERJET 4+	$1359
HP LASERJET IVSI	2799
HP LASERJET 4MP	1299
HP LASERJET 4M+	1869
HP LASERJET 4L	629
HP SCANJET IICX	879

NOTEBOOKS

APPLE

P/B 520 4/160	$2049
P/B 540 4/240	CALL
P/B 540C 4/320	CALL

IBM

360 4/250	CALL
360C 4/250	CALL
750C 4/170	$4569
750CS 4/170	3499
750CS 4/340	4058
755C 4/170	CALL
755 4/540	CALL

TOSHIBA

1960CS 4/200	$2349
1960CT 4/200	2949
1960CT 4/340	3199
3600CI 4/250	3999
4700CT 8/200	4799
4700CS 8/230	3369
4800 8/500	CALL

SHARP

486 DX-33 4/200	$2775

NEC

486 DX2-40 4/120	$2535
486 DX2-40 4/250	2929
486 DX2-40 4/120 AMC	3359
486 DX2-40 4/250 AMC	3799
486 DX2-50 4/209	4170
486 50E, DX-75 120/350HD	CALL

TEXAS INSTRUMENTS

TM 4000E 4/120	CALL
TM 4000E 4/200C	$2619
TM 4000E DS 4/200	2869
TM 4000E AMC 4/200	3679

EPSON

ACTION LASER 500C	$2099

MONITORS

NEC

3V	$449
4FGE	619
5FGP	1119
5FGE	989
6FGP	1969

MITSUBISHI

14" SVGA	$359
15" DIAMOND SCAN	449
17" DIAMOND SCAN	939

PRINTERS

EPSON LQ570	$249
EPSON LASER 1500	675
OKIDATA 400E	475
OKIDATA 410E	629
OKIDATA 320	299

SCANNERS

EPSON 800C	$999
UMAX 1260	1179
HP SCANJET IIP	499

Apple® HEWLETT PACKARD OKIDATA® COMPAQ EPSON®

AUTHORIZED SERVICE CENTER FOR COMPAQ, HEWLETT PACKARD, & TOSHIBA PRODUCTS.

PRICES REFLECT CASH DISCOUNT. NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. ALL LOGOS ARE REGISTERED TRADEMARKS OF THEIR RESPECTIVE COMPANIES.

VISA AMERICAN EXPRESS DISCOVER ATM

Are you ready to go back to school with Novell Education?

At Certified Network Educators you can

Buy *one* Novell Authorized Course at the regular price . . .

. . . and pay only *1/2* for a second course.*

*of equal or lesser value.

Benefits of obtaining your CNE through Certified Network Educators:

- Now offering night and evening courses in our Sandy location
- Satisfaction guaranteed
- All instructors have "in-the-field" experience
- Quality Novell Education
- Great prices

Don't wait another minute! Take advantage of our buy-one course and get the second course at half-off and start increasing your marketability.

There is no limit on the number of courses you can buy.

This offer is good from August 1, 1994 through October 15, 1994.
Sorry, the Quick Course is not included in the special offer.
Offer not valid with any other promotions.

Corporate Headquarters
7001 S. 900 E.
Suite 420
Midvale, UT 84047
(800) 9NOVELL
(800) 966-8355
(801) 255-0400
Fax (801) 255-0404

Newport Beach
4000 Westerly Place
Suite 140
Newport Beach, CA 92660
(714) 261-2475
(800) 9NOVELL

Woodland Hills
21241 Ventura Blvd.
Suite 2793
Woodland Hills, CA 91364
(818) 888-4910
(800) 9NOVELL

San Francisco
55 Stevenson St.
2nd Floor
San Francisco, CA 94105
(415) 243 9923
Fax (805) 243-9924
(800) 9NOVELL

Point of Sale • Networks • Systems
Repairs • Maintenance • Training
Complete System Services
Satisfaction Guaranteed!

Novell Certified NetWare Engineer

We Specialize in Point of Sale Systems And Software!

We automate all types of businesses; including services, manufacturing, and restaurants, for a lot less than you thought. Call us for a quick quote. Complete installation and training on all point of sale systems.

Training

We offer complete training for Point of Sale Systems, Wordperfect and Quatro Pro!

ELO Touch Screens

14" SVGA .28 Bus Controller Monitor
$785

20" Monitor
$2850

Serial Bus Available!

Monitor Repairs

Monitor Repairs $65 plus parts

Monitor Alignment & Adjustment $50

BACKYARD COMPUTER SERVICES
Over 10 Years Experience • Serving the Entire Bay Area • Free Parking in Rear of Store
(510) 689-3733 • 1842 Colfax St., Concord, CA 94520

Internet *continued*

No terminal room, but one machine on the Internet for attendees to use.

Boston (June 6–10)

The USENIX Association celebrated twenty-five years of UNIX computing with a refereed program, invited talks, and special anniversary sessions. Peter Salus chaired a session on the history of the ARPANET, which began operations twenty-five years ago this year. He's writing a book about the history of the ARPANET and the Internet, continuing the historical theme from his recent *25 Years of UNIX.*

In this session he had Dave Clark (the Internet Architect), Mike Muuss (self-proclaimed early Internet UNIX bigot), and Alex McKenzie (from BBN, which was the prime contractor of the early ARPANET). The discussion was wide-ranging. John contributed a current map of the Internet, which Peter contrasted to The Earliest Network Map, which he had recently discovered in RFC 4. The session ended with speculation on who invented distributed electronic mail and when. John had the earliest date, relating correspondence with Ray Tomlinson of BBN, who said he did it but couldn't remember whether it was in 1972 or 1973.

Gretchen coordinated the terminal room repeating several past services, including Kerberos authentication, distribution of Free Software Foundation (FSF) software, and Xterminal access to the Internet. There was also a terminal server connected to half a dozen hotel house phones, for those of us with laptops in our rooms.

Prague (June 15–17)

INET'94 claimed twelve hundred participants, and it looked like that many people were there. Unfortunately, the organizers were not prepared for so many; for example, they ran out of tickets for the reception after one thousand. Nonetheless, it went quite well, we thought. It seemed that every country in the Matrix had a representative there, from Ghana to Singapore. Singapore will be the site of INET'95, and had a booth in the vendor exhibit.

The politics of networking were pretty evident here. The conference itself was a coproject of the Internet Society (ISOC) and RARE (Associated European Research Networks). RARE is funded by the European Commission and sponsors Dante, which is roundly disliked by proponents of Ebone, which was the first pan-European backbone IP network.

A bit of European vs. North American IETF (Internet Engineering Task Force) politics was also aired. The first speaker was George Soros, famous for augmenting his billions by betting against the pound a couple years ago, and for funding network infrastructure projects in the east of Europe. The final speaker was from the White House, with a David Letterman-style top ten list.

It was much easier to find people at INET than at InterOp, although INET is also getting so large that timesharing is becoming a major problem. Nonetheless, lots of people who were in Las Vegas were actually accessible in Prague.

The vendor exhibit was very small, with perhaps a couple dozen booths, at least three of them publishers (O'Reilly, Paramount, Addison-Wesley).

The terminal room was extensive, with Suns, Macs, and DOS PCs. Printing, however, required asking one of the administrators, who would FTP it to a particular machine and manually queue it.

John and Gretchen gave a paper (Smoot was a coauthor, but he had to give a tutorial at Sun User Group in California, and hasn't yet figured out how to teleport or colocate). We had wanted to call it "The Latency of Europe," but somebody thought that might imply a continent of sluggards, so it was retitled to "The Internet Pinged and Mapped." The subject was round trip times as measured by ICMP ECHO using ping. There were two other ping papers, one before, and one after. About eighty people came to see all three, and asked very good questions.

It was much easier to find people at this conference than at InterOp, although INET is also getting so large that timesharing is becoming a major problem. Nonetheless, lots of people who were in Las Vegas were actually accessible in Prague.

Copenhagen (June 20)

Keld Bjorn Simonsen is hard to find in telephone directory assistance unless

continued on page 302

CORPORATE INQUIRIES : 415/968-2618 FAX YOUR INQUIRIES : 415/968-2618

• • • Count On Us For The Best Prices And Service • • •

IBM®

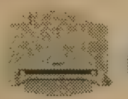
VALUEPOINT 486DX33 4/120 MB SVGA/VLB	**$1199**
VALUEPOINT 486DX2/66 4/ no. hd. SVGA/VLB	**$1699**
Thinkpad 755C 4/540	**BEST**
Thinkpad 755CS 4/540	**$5199**

BACK TO SCHOOL SALE. SALE. SALE.

Authorized Reseller

90 days same as cash

Power Mac 7100 8/250 CD	**$2969***
PowerMac 7100AV 8/500 CD	**$3729***
Power Mac 8100 8/250 CD	**$4159***
Power Mac 8100 AV 16/500 CD	**$5199***
Power Mac 8100 Softwin	**$4879***


Apple StyleWriter *II*
$279 *

Apple Poratable StyleWriter
$399 *

LaserWriter 300
CALL

LaserWriter 320
$899 *

DOS Compatible Models
For running DOS MAC applications

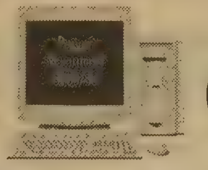
Apple 14" color **PLUS** monitor
105 key **keyboard** & Power
Macintosh 6100 **SoftWindows**
*60 MHz **PowerPC** 601 CPU*
*16 MB RAM **250** MB hard drive*
$2719 *

NEC 15-inch Color Monitor Bundle
Above 6100 Softwin bundle w 105 key keyboard, and NEC 15-inch color monitor instead
$2909*

NEC monitor

Apple 14" color **PLUS** monitor
105 key **keyboard** & Power
Macintosh 7100 SoftWindow
*66 MHz **PowerPC** 601 CPU*
*16 MB RAM **250** MB HD*
$3549 *

NEC 15-inch Color Monitor Bundle
Above 7100 Softwin bundle w 105 key keyboard, and NEC 15-inch color monitor instead
$3719*



COMPLETE SYSTEM

Multimedia AV Models
For multimedia video editing applications

Apple 14" color **Plus** monitor
105 key **keyboard**
Power Macintosh 6100 AV
*8 MB RAM **250** MB HD & CD*
$2799*

NEC 15-inch Color Monitor Bundle
Above 6100AV bundle w 105 key keyboard, and NEC 15-inch color monitor instead
$3129*

NEC monitor

Apple 14" **AV monitor**
105 key **keyboard**
Power Macintosh 7100 AV
*8 MB RAM **500** MB HD & **CD***
$4429 *

Get ClarisWork $99
MacTools $49.95
($100-150 Saving)
With purchase of any Macintosh CPU. Offers good while stock last

COMPLETE SYSTEM

Built-in CD Models
For graphics presentation applications

Apple 14"Color Plus **monitor**
105 key **keyboard** & Power
Macintosh **6100** 8/250 **CD**
*8 MB RAM **250** MB HD & **CD***
$2499 *

NEC 15-inch Color Monitor Bundle
Above 6100 8 250 CD bundle w 105 key keyboard, and NEC 15-inch color monitor instead
$2689*

NEC monitor

Apple 14" Color Plus **monitor**
105 key **keyboard** & Apple
Power Macintosh**7100** 8/250 **CD**
*8 MB RAM **250** MB HD CD*
$3329*

Complete System w/ **Printer** Bundle
Above 7100 8 250 CD bundle w 300 dpi Postscript Texas Instruments PS23 laser printer
$4039*

Apple 14" Color Plus **monitor**
105 key **keyboard** & Power
Macintosh **8100** 8/250 **CD**
*8 MB RAM **250** MB HD CD*
$4519 *

17-inch Color Monitor Bundle
Above 8100 8 250 bundle w 105 key keyboard, and 3rd party 17-icnh color monitor instead
$4969*

17" monitor

Affordable Entry Models
For college students business applications

Apple 14" Color Plus **monitor**
105 key **keyboard**, Apple®
Power Macintosh™ **6100** 8/160
*8 MB RAM **160** MB hard drive*
$2065 *

NEC 15-inch Color Monitor Bundle
Above 6100 8 160 bundle w 105 key keyboard, and NEC 15-inch color monitor instead
$2259*

Apple 14" Color Plus **monitor**
105 key **keyboard**, Apple®
Power Macintosh™ **7100** 8/250
*8 MB RAM **250** MB hard drive*
$3069*

Complete System w/ **Printer** Bundle
Above 7100 8 250 bundle with 300 dpi Postscript Texas Instruments PS23 laser printer
$3779*

Apple 14" Color Plus **monitor**
105 key **keyboard**, Apple® Power
Macintosh™ **8100** 8/250
*8 MB RAM **250** MB HD*
$4259 *

17-inch Color Monitor Bundle
Above 8100 8 250 bundle w 105 key keyboard, and 3rd party 17-icnh color monitor instead
$4719*

Introducing Apple Latest Models

Apple PowerBook 150
The most affordable PowerBook replacing the Apple Power Book 145B

Apple Quadra 630
[illegible]
CALL

Q605 Software Bundle System Preloaded w/ Eight Software:
Claris Worlks, Quicken, American Dictionary, Full Contact, ... and more.

COMPLETE SYSTEM

Apple 14" Color Plus **monitor**
105 key **keyboard** & Apple®
Macintosh **Quadra™605** 4/160
*4 MB RAM **160** MB hard drive*
$1349*

Q605 CD Multimedia System Bundle
Above Q605 4 160 Bundle w Apple Multi media Kit (incld: ext. CD drive, speakers, encyclopedia)
$1799*

Apple 14" Color Plus **monitor**
105 key **keyboard** & Apple
Macintosh **Quadra 605 8/250**
8 MB RAM 250 MB hard drive
$1649*

HEWLETT PACKARD

DeskJet/DeskWriter Portable 310	$299
DeskJet 520	$299
DeskJet/ DeskWriter 560C	$599
LaserJet 4L	$699
LaserJet 4P	$999
LaserJet 4ML	$1049
LaserJet 4MP	$1399
LaserJet 4M+	**$1999**
LaserJet 4+	$1449
DeskJet 1200C	$1449
DeskJet 1200c/ PS	$2249
LaserJet 4si	$2999
ScanJet IIP	$499
Scan Jet IIcx	$949

Texas Instruments Computers and Printers

New 75 MHz NoteBook
75 MHz Intel DX4, 9.5"
Active Matrix Color
4MB RAM 455 MB HD
In Stock.....Limited Qty
Available at $ 4749

TEXAS INSTRUMENTS

Dual Scan Color

WinDX2/50 (4/200)	**$2499**
WinDX2/40 (4/200)	**$2249**
Multimedia SX25 (4/120)	**$2499**
WinSX25 (4/120)	**$1849**

Active Matrix Color

WinDX2/50 (4/200)	**$3099**
MultiMedia DX4/75(4/340)	**$5199**

TI Printers

MicroMarc Color	**$379**
MicroWriter PS23	**$699**

Okidata LED Page Printer

OL400E, 300 dpi	**$499**
OL410E, 600 dpi	**$649**

Canon NoteBook Computers and Printers

Canon

"Laser-quality text at about half the cost"
PC World

Innova NoteJet Mono w/ built-in printer

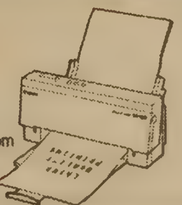
486 SX 33MHz 4/120 MB mono	**$1879**
486 SX 33MHz 4/200 MB mono	**$1999**

Dual Scan Color

486 SX 33MHz 4/120 MB	**$2449**
486 SX 33MHz 4/200 MB	**$2599**

NoteJet II Color

486 SLC 2/50MHz 4/130 MB	**$2799**
486 SLC 2/50MHz 4/260 MB	**$2999**



BJ100, 360 dpi	**$239**
BJ10sx portable	**$249**
BJ200E	**$299**
BJ230 (wide 132 column)	**$399**
LBP-430 (300dpi, 4ppm)	**$589**
BJ-600 Color 360 dpi	**$589**

Sacramento:
1870 Fulton Ave.
(916) 972-7678
(M-F 10-7 SAT 11-5)

Walnut Creek:
1601 North Main St.
(510) 256-8828
(M-F 10-7 SAT 11-5)

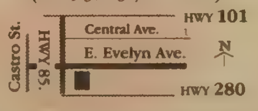
San Francisco
217 Sansome St.
(415) 421 - 1801
(M-F: 9:00-6:00, SAT 11-5)

Montgomery St.
California St.
Sansome St.
Market St.

San Francisco
5000 Geary Blvd.
(415) 387 - 7272
(M-F: 10:00-7:00, SAT 11-5)

14th Ave.
Geary Blvd.

MOUNTAIN VIEW
67 East Evelyn Ave.
(415) 968 - 3466
(M-F: 9:30-6:30, SAT closed)



* Prices reflect cash discounts

THE COMPUTER STORE
SINCE 1986
MOUNTAIN VIEW • SACRAMENTO
SAN FRANCISCO • WALNUT CREEK

Offers expire 9/18/94

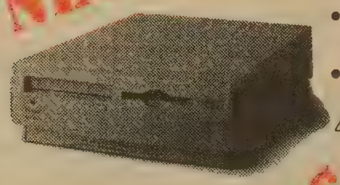
*** Mounting kits, cables, installation are not included • 105 key keyboard is 3rd party keyboard. "90 days as same as cash" subject to credit approval & subject to change or can be discontinued without prior notice • Apple, the Apple logo, Macintosh are the registered trademarks of Apple Computer, Inc. The Macintosh PowerBook, Macintosh Quadra, Power Macintosh, StyleWriter are the trademarks of Apple Computers, Inc. IBM are registered trademarks of International Business Machines Corp. All brands and product names are the trademarks of their respective companies. Prices and stock availability subject to change without notice. Not responsible for typographical errors.

FOR CORPORATE SALES IN SAN FRANCISCO CALL: **415-956-1777**

San Francisco Only

APPLE® MACINTOSH QUADRA® 630

NEW



- 68040 at 33 MHz
- Built-in FPU
- 4 MB expandable to 36 MB(72pin)
- 250 MB HD

4 /250

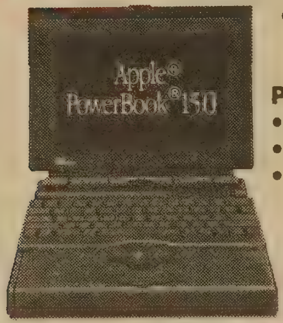
$1249.99

APPLE® MACINTOSH® DESKTOP COMPUTERS

Apple® Power Macintosh™ 6100/60 8/160	$1629.99
Apple® Power Macintosh™ 7100/66 8/250	$2599.99
Apple® Power Macintosh™ 8100/80 8/250	$3749.99
Apple® Macintosh Quadra® 605 4/160 w/SFW	$979.99
Apple® Macintosh Quadra® 610 8/230	$1649.99
Apple® Macintosh Quadra® 660AV 8/500/CD-ROM drive	$1999.99

APPLE® POWERBOOK® 150

NEW



- Lightweight 5.5 pounds
- Powerful 33MHz Motorola 68030 processor
- 120 MB internal HD drive
- Expandable from 4 MB to 40 MB of RAM

PREINSTALLED SOFTWARE

- Macintosh System 7
- ClarisWork 2.1
- Remote access, Power management, DOS and Windows compatibility

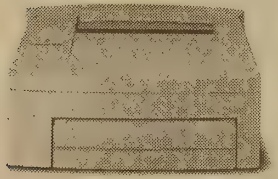
4 /120

$1399.99

APPLE® NOTEBOOK COMPUTERS

Apple® PowerBook® 520 4/240	$2149.99
Apple® PowerBook® 520c 4/160	$CALL
Apple® PowerBook® 540 4/240	$2999.99
Apple® PowerBook® 540c 4/320	$CALL
Apple® PowerBook® 280 4/240	$2499.99
Apple® PowerBook® 280c 4/320	$3469.99
Apple® PowerBook Duo® Dock 512K VRAM	$CALL
Apple® Macintosh Duo® Mini Dock	$449.99

APPLE® PRINTERS



APPLE® PERSONAL LASERWRITER® 320

- 300 dpi, FinePrint™, PhotoGrade™
- 4 PPM
- AMD 29205 RISC Processor
- 39 Scable fonts
- Paper tray 100 sheets

$879.99

Apple® LaserWriter® 360	$1499.99
Apple® LaserWriter® Pro 630	$1969.99
Apple® Color StyleWriter® Pro	$599.99
Apple® StyleWriter® II	$299.99

APPLE® MONITORS

APPLE® AUDIOVISION™ 14 DISPLAY

The Apple® AudioVision™ 14" Display offers integrated audio and video features that let you take advantage of your software applications.

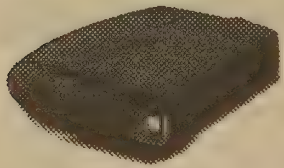
- 14" (diagonal) screem; Sony Trinitron tube
- 640 x 480 pixels; 70 dots per inch
- Two ADB ports, sound-input port, headphone and microphone ports
- Built-in stereo speakers

$CALL.99

Apple® Color Plus 14 Display	$299.99
Apple® Color Display	$399.99
Apple® Multiple Scan 17 Display	$989.99
Apple® Multiple Scan 20 Display	$1949.99

MULTIMEDIA

APPLE® QUICKTAKE™ 100



Lightweight digital camera that allows you to take 24-bit color pictures without using film-import them directly into your Macintosh® or Windows-based computer. It displays images up to 16.7 million colors.

$699.99

AppleCD™ 300 Plus Internal	$299.99
AppleCD™ 300 External	$369.99

ETC

Apple® OneScanner™	$669.99
Apple® Color OneScanner™	$995.99
Apple® Adjustable Keyboard	$109.99

CALL FOR ITEMS NOT LISTED. ® Authorized Dealer

Apple, the Apple logo, Macintosh, Macintosh Quadra, PowerBook and StyleWriter, Newton andLaserWnter Select are registered trademarks of Apple Computer, Inc Adobe is a registered trademark of Adobe Systems, Inc. Power PC™ ıs trademarks of International Business Mach Corporation, Used under license there from. All brands are registered trademarks of their respective companies. Computown is not responsible for typographical errors. Limited to stock on hand. Prices/specifications are subject to change without notice.
Pnces reflect cash discount only Prices may vary from store to store.

Prices honored upon presentation of this ad only.

Computown

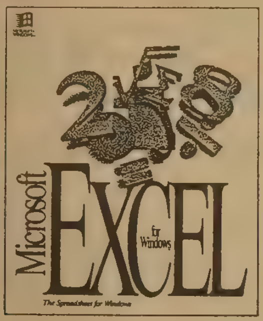
SF Retail Opens Daily

SF San Francisco

RETAIL SALES
(415) 956 8696
SERVICE CENTER
(415) 982 TECH (8324)
CORPORATE SALES
(415) 956 1777

"We will match any locally advertised price!"

Please call for details.



PLEASE CALL FOR ITEMS

SOFTWARE

QUARK EXPRESS 3.3 Mac/IBM	$599.99	**Fox** Pro Professional MAC	$419.99
ILUSSTRATOR 5.5 Mac	$399.99	**LOTUS** 123 IBM version 4	$298.99
ILUSSTRATOR 4.0 IBM	$419.99	**MICROSOFT** Office Std MAC/IBM	$499.99
ILLUSTRATOR/PHOTOSHOP IBM	$689.99	**MICROSOFT OFFICE PRO** IBM	$599.99
PHOTOSHOP Mac/IBM	$599.99	**DISK DOUBLER** MAC	$54.99
CORELDRAW 5.0	$559.99	**BORLAND** Paradox IBM	$599.99
FRACTAL DESIGN PAINTER Mac/IBM	$249.99	**CONNECTIX** Ram Doubler MAC	$59.99
PAINTER X2 extensions Mac/IBM	$99.99	**BORLAND** C++ IBM	$389.99
KAI'S POWER TOOLS Mac/IBM	$109.99	**NORTON** Desktop IBM	$124.99
CLARIS WORKS IBM	$159.99	**MACROMODEL** MAC	$699.99
CLARIS WORKS MAC	$199.99	**STRATA** Studio Pro MAC	$859.99

PLEASE CALL FOR ITEMS

ACCESSORIES: CD-ROM DRIVES & SOUND CARDS

MEDIA VISION Double fusion Kit	$299.99	**CREATIVE** Sound blaster 16 SCSI-2	$189.99
PLEXTOR 4 plex Quad speed SCSI	$499.99	**MEDIA VISION** ProAudio spectrum 16	$99.99
NEC 3XE tripple speed external drive	$495.99	**NEC** 3Xi tripple speed Internal drive	$449.99

Authorized Dealer

SONY

NEC

IDEK

ACCESSORIES: POINTING DEVICES

LOGITECH Cyberman 3D mouse	$69.99	**DEXXA** IBM compatible joystick	$64.99
LOGITECH Mouse Man Ergonomic mouse	$49.99	**POINTEX** Mac Mouse	$29.95
KENSINGTON Trackball for MAC	$119.99	**WACOM** Artz presure Sensitive tablet Mac.	$319.99
KENSINGTON Trackball for PC	$99.99	**WACOM** Artz presure Sensitive tablet PC	$369.99

ON DEMO

New from Apple®
Multiple Scan 17 Color
$989.99

MONITORS

APPLE® Basic Color Display	$299.99	Apple® 15" monitor	$CALL
APPLE® Multiscan 21"Display	$1949.99	17" MultiScan	$989.99
NEC 3V 15" Flat square CRT	$469.99	14" Non-Glare SVGA	$319.99
NEC 15" Multisync 3FGe	$599.99	15" Multisync .4FGe	$659.99
NEC 17" Multisync 5FGP	$1169.99	21" 6FG .28 dpi	$2089.99
NEC 21" Multisync 3PG	$2089.99		
IDEK Multisync 17", .26 dot pitch GREAT VALUE	$789.99	Multisync 21"	$1849.99
SONY CPD-15SF1 15" NEW	$449.99	GDM 17SE1 17"	$999.99
SONY GDM-2036s 20"	$1779.99	CPD-2038s 21"	$CALL
NANAO F560W FlexScan 17"	$1199.99	**RasterOps** 17"	$899.99

MV *Mountain View* (415) 962 8696

PH *Pleasant Hill* (510) 682 8696

SJ *San Jose* (408) 275 8696

"Let's Compute!"

Computown

UNIX • BY BENNETT FALK

UNIX: Whither And Why (Again)

Every once in a while, this space tries to remember why it is that anyone should give two hoots about UNIX (and about sed and awk and all the rest of it as well). Where, if anyplace, is UNIX going and why is it going there?

In part, it is possible to tell where UNIX is going by looking at where it has been. In one form or another, UNIX has been around for twenty-five years. It started out in corporate and academic research institutions (think tanks and whatnot). Early UNIX was the province of full-tilt brainos and their document production centers. UNIX was a tool that let researchers do what they wanted. It also helped them adapt to new hardware without losing productivity.

Eventually, the 16-bit microprocessor was invented, not just once, but several times over, and in rapid succession a number of computer architectures came to market. Rather than invent a new operating system for each architecture, a few cutting-edge hardware vendors decided that UNIX might make business sense, and the late 1970s and early 1980s saw a flood of microprocessor-based, low-cost, multiuser systems running UNIX.

Timesharing

The buyers of these machines were not full-tilt brainos. They were business people, and they bought these computers to achieve a more equitable distribution of computing resources. The dominant computer presence in the business world had been the mainframe, and it was rapidly becoming a bottleneck. Multiuser, timesharing computers would give more people access to business data, and UNIX provided a way of distributing data and computer resources to small groups of people.

The introduction of small, multiuser computers into businesses changed the way businesses organized both people and data. Previously, data processing had been a business function that resided in one department dedicated to information management. With relatively inexpensive UNIX-based computers, individual departments could take control over their own data.

PCs, Networks, And Workstations

The first generation of multiuser supermicros was quickly eclipsed by the introduction of powerful personal computers in the early 1980s. The arrival of personal computers as business tools accelerated the decentralization of corporate data processing.

However, the association of UNIX with hardware vendors endured: UNIX has proven to be a tool for making hardware usable and, therefore, buyable. To this day, the giants of the UNIX industry are hardware manufacturers (Hewlett-Packard, Sun, SGI, and IBM). Perhaps unjustly, the success of UNIX is measured by the success of the hardware vendors that depend on it.

> **Early UNIX was the province of full-tilt brainos and their document production centers.**

Having found in UNIX a stable, scalable operating system, hardware vendors began to experiment. The '80s saw the introduction first of networked UNIX computers, and then the UNIX workstation. UNIX workstations are specialized computers to improve productivity for individuals working in professions (like securities trading and the various forms of engineering) that involve a lot of computation. Workstations combine an extraordinarily powerful single-user computer running UNIX with a graphical user interface and network connectivity.

In a way, UNIX-based workstations were a return to the roots from which UNIX had developed: after all, a lot of the people who use workstations are full-tilt brainos. However, workstations also capitalized on one legacy of the personal computer revolution: a widespread conviction that computing resources should be personalized rather than shared.

Not everyone needs a workstation, however, and PCs became even more powerful, even easier to use, and even cheaper. The UNIX workstation market continues to be robust, but workstations have not become the kind of volume commodity that personal computers are. The UNIX vendors have had to innovate to sustain their rate of growth.

One result of the influx of both workstations and personal computers is increased

LAP-TOP SUPERSTORE

Super Low Prices–
Professional Atmosphere

3607 El Camino Real
Santa Clara, CA
408/249-9888
FAX: 408/249-0860

(At the intersection of
El Camino Real and the
Lawrence Expressway)

ASSEMBLED IN SAN JOSE!

Avanti by BCC

- 4MB RAM
- 486DX2/66
- 200/340MB HDD
- PCMCIA Expandability
- 9.5" Dual-Scan Color Display

200MB HDD	$2,595.99
340MB HDD	$2,795.99

NEC

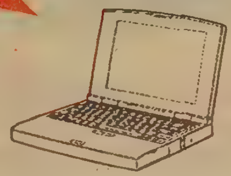
Versa V Series

NEW

- 486 Power
- 4MB RAM
- Local Bus Video Built-In
- 2 Type II or 1 Type III PCMCIA Slot
- 4-6 Hours Battery Life

DX2/50	STN	250HDD	$2,899.99
DX2/50	TFT	250HDD	$3,699.99
DX2/50	TFT	340HDD	$3,899.99
DX2/50	TFT	540HDD	$4,379.99

Versa S Series



- 486 Power
- 4MB RAM (up to 20)
- Highly Portable
- 4-6 Hours Battery Life

SX/33	Mono	210HDD	$1,939.99
SX/33	STN	210HDD	$2,369.99
SX/33	TFT	210HDD	$3,289.99
DX2/50	TFT	260HDD	$3,769.99

TRUE SUB-NOTEBOOK!

- 486 Power
- 4MB RAM
- 130MB HDD
- 2 Type II PCMCIA
- Built-in Sound Card
- Built-in Trackball
- 3.5" FDD Included!

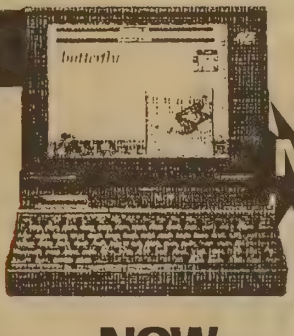
MITAC

GREAT VALUE!

ONLY
$1,189.99

ASCENTIA 900N

AST COMPUTER



NEW

- 486DX4/75CT
- 8MB RAM
- 510MB HDD
- PCMCIA
- 3.5" FDD
- Integrated Pointing Device

NOW
$5,939.99

NEW MEDIA CORPORATION

.WAV jammer
16-Bit PCMCIA Audio Card
$289.99

Bus Toaster–PCMCIA
Hi Performance SCSI Card
$249.99

PCMCIA Ethernet 10 Base-2	$179.99
PCMCIA Ethernet 10 Base-T	$159.99
PCMCIA Ethernet 10 Base-2/T	$189.99

Panasonic Office Automation OA

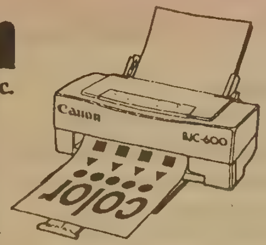
CF-V21P Multi-media!

- 4MB RAM exp. to 20MB
- 200MB or 450MB HDD
- PCMCIA Type III
- Built-in trackball
- Optional built-in CD-ROM & TV tuner w/VCR input

DX2/40CT	4/200	$3,819.99
DX2/50CT	4/200	$4,189.99
DX4/75CT	4/450	$5,279.99

Canon

Canon Computer Systems, Inc.



BJ-10sx
Bubble Jet Portable Printer
ONLY....$229.99*

BJ-100
Bubble Jet Printer
ONLY ... $219.99*

BJ-200e
Bubble Jet Printer
ONLY ... $269.99*

BJC-600
Bubble Jet Color Printer
ONLY ... $569.99*

*prices after $30 Canon rebate

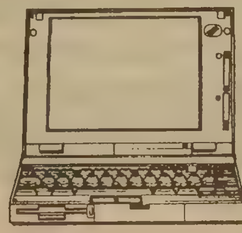
$30 Rebate on Canon Printers! See Store for Details!

IBM

Thinkpad 755CS

- 486DX2/50
- 4MB RAM/170MB HDD
- Dual-scan color
- Integrated Trackpoint
- 3.5" FDD

$3,599.99



Thinkpad 755CS

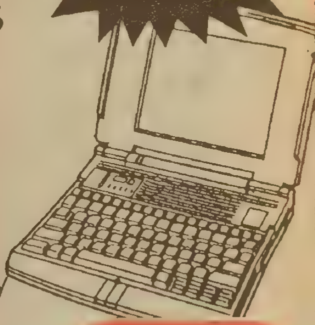
- 486DX4/75
- 4MB RAM/170MB HDD
- Dual-scan color
- Integrated Trackpoint
- 3.5" FDD

$4,149.99

TEXAS INSTRUMENTS

NEW!

TI4000M



- 4MB RAM
- 486SX/25
- 120MB HDD
- PCMCIA Expandability
- Trackpoint Built-in
- Advanced Color Display
- Audio In/Out Microphone Jacks

CoLoR

ONLY
$2,219.99

Acom EVEREX NTC/Chembook TOSHIBA
Canon Canon Computer Systems, Inc. NEC PSION SHARP

We Welcome:
Corporate POs
and
AMERICAN EXPRESS DISCOVER MasterCard VISA

Store Hours:
Monday - Friday
9:30 a.m. - 8:00 p.m.
Saturday
10:00 a.m. - 7:00 p.m.
Sunday
11:00 a.m. - 6:00 p.m.

"The Portable Computing Specialists"

• BOSTON,MA • CAMBRIDGE,MA • NATICK,MA • SALEM,NH

File

Monitor & Terminal Repair Specialist

• IBM • Macs • SVGA • VGA • CGA • EGA • Monochromes • Multi-Syncs

advantix inc

REDWOOD CITY 1757 East Bayshore Rd. Suite 22

Factory Authorized Repair Center

Samsung • Zenith • Radius

• FREE TUBE REJUVENATION

• FREE ESTIMATE • FREE DEGAUSSING

• VOLUME DISCOUNT AVAILABLE • LOANERS AVAILABLE

One Year Warranty On Any Repaired Unit(s)

Tel 415 • 363 • 1225 Fax 415 • 363 • 0685

1 800 • 553• 5703

Edit

Printers, Desktops, Laptops & PC's Repair Specialist

We Deliver And Install

One Year Warranty On Any Repaired Unit(s)

ComputerCare

MOUNTAIN VIEW 2455 Old Middlefield Way, Suite M

Authorized Repair Center OKIDATA EPSON

HEWLETT PACKARD COMPAQ TOSHIBA IBM Business Partner

• Tel 415/967-8186 • Fax 415/967-6945

• 1 800 67/CARE/4

2 2 7 3

Computer Rescue

Staffed with highly skilled, qualified technicians, ComputerCare will diagnose and treat your machine's problem accurately and promptly.

Warranty Service

ComputerCare provides warranty and post warranty service.

Service Contracts

We loan you equipment while we repair yours. Please call us for a plan customized to best suit the needs of your company

Other Services Available

- In Shop Service
- On Site Service
- Overnight service

UNIX *continued...*

Fifteen years ago, managers purchased UNIX systems to assert their departmental autonomy and take control of their own data.

reliance on networks to share data. The prevalence of networks fostered client/server application design, and, faced with something less than total success in the desktop computer market, the vendors of UNIX-based hardware now geared up to supply server hardware.

Over the past few years, the marketing emphasis among UNIX vendors has shifted from individual productivity to distribution of both data and computing resources. This may sound familiar: after all, UNIX was first offered to the business community in the late 1970s as a tool for distributing computer resources more efficiently.

But things have changed. In the 1970s distributed resources were a solution to the problems caused by centralized, mainframe-based data processing. Now distribution is a tool of centralization, a way of integrating (or at least standardizing) resources that are strewn all over the corporate environment on desktop-sized islands.

Fifteen years ago, managers purchased UNIX systems to assert their departmental autonomy and take control of their own data. Now UNIX systems are purchased by corporate information managers to establish and maintain "enterprise-wide" business processes.

What holds the modern business together is not its mainframe but its network, and UNIX systems are used both to publish information on corporate networks and to manage the networks themselves. Finally, after appealing to departments, workgroups, and individuals, UNIX vendors have begun to target corporate customers.

The Net And Beyond

The current focus on the enterprise will not last forever. If there is anything like a Natural Law that applies to business, it states that equilibrium is unattainable. No market state is stable for very long, but that's scary because it is not clear where UNIX can go when its corporate customers are not as lucrative as they are now.

Of course, the community of full-tilt brainos (housed in the various public and private research institutions that nurtured the original UNIX systems) has not been idle all this time. From the research community we have the Internet, a large, relatively easy-to-use network of networks that has captured the public imagination.

For those businesses whose corporate network and business processes are closely linked, it's a short leap to imagine the Internet as a prototype for connecting enterprises together electronically. It's not inconceivable that the future of UNIX will depend on its ability to support inter-enterprise transactions over a high-speed public network. Instead of filling out a paper form to buy things from a supplier, you'll simply use a program the supplier gave you to place your order and follow up on it.

This is not as far-fetched an idea as it might seem. Quite apart from the Internet, some business transactions are already handled electronically. Federal Express already provides software that lets its customers track their shipments. Closer to home, we've become accustomed to using credit cards and ATM cards in gas stations and grocery stores. Here, a specialized piece of hardware at the point of sale collects information about the transaction and places a call to the bank that will handle the billing to report the transaction.

The dialog between an ATM machine and a financial institution's central computer is crude compared with the possibilities the Internet offers for mediating business transactions between companies.

ROBERT AUSTIN PRESENTS
The Computer Show & Sale

LOWEST PRICES IN THE USA!

PC Compatibles • Hardware
Software • Accessories

UPCOMING SHOWS

SANTA CLARA COUNTY FAIRGROUNDS
August 20, 1994
344 Tully Rd.
San Jose

COW PALACE
August 27, 1994
Corner of Geneva & Santos
San Francisco

SANTA CLARA COUNTY FAIRGROUNDS
September 11, 1994
344 Tully Rd.
San Jose
SPECIAL SUNDAY SHOW!

OAKLAND COLISEUM
September 17, 1994
I-880 & Hegenberger Rd.
Oakland

- Super Low Prices
- 40,000 Sq. Ft. of Bargains
- Thousands of Products
- Major Brand Names

Super Savings on:
- Latest PC Systems
- Business Software
- Game/Family Software
- Multimedia Upgrades
- CD ROM Software
- Memory Upgrades
- Super VGA Monitors
- Accessories/Supplies
- Hard Drives & More!

ALL SHOWS OPEN FROM
10AM TO 4PM
KIDS UNDER 12 ARE FREE!

Thousands of Products!

Instead of specialized hardware (like credit card readers or ATM machines), inter-enterprise business on a public computer network would require client-server applications that could be deployed between businesses. These are still rare: most client-sever business applications are designed for use within the company that developed them.

At least one Internet-based consortium (CommerceNet) is exploring the requirements a public network would have to satisfy to make this possible. One of the issues of concern to CommerceNet is the security of application protocols that would carry business traffic over a public network, and a draft proposal for a secure version of the Hypertext Transport Protocol (HTTP) has been produced. CommerceNet can be reached via the World Wide Web (use the URL http://www.commerce.net to get the CommerceNet home page) or via email (info@commerce.net).

If the companies that make up the UNIX industry take up the inter-enterprise challenge, some interesting things will happen. The hardware vendors will diversify to provide software and services in addition to hardware. There is already widespread recognition that practically no one buys hardware for the sheer pleasure of owning a nice computer. People buy hardware to solve problems, and if you make hardware, you'll sell more of it if you provide tools that apply your hardware to the problems that people have. To survive in the inter-enterprise market, hardware vendors will cast themselves as "solution providers," a role for which software manufacturers and consultants already compete.

Along with increased competitive pressures, there will also be increased demand for products that work together. Products from competing vendors will have to interoperate, so the competitors in the inter-enterprise market will also have to cooperate to some extent. This will either drive the vendors in this market crazy or make them better human beings. In either case, you probably want to bone up on grep and sed and awk because UNIX will be around a while longer. ■

Copyright © 1994 by Bennett Falk. All rights reserved.

CNE
AT
NIGHT

If you aspire to be a Novell Certified Netware Engineer (CNE), but have trouble getting time off during the day, Evernet Education Services has the program for you. Evernet is now offering CNE courses in the evening.

Our scheduled courses will be conducted in our state of the art classroom with Novell certified instructors to ensure you gain all the knowledge required to pass the certification tests. And the best part is you can take the courses in non-business hours and not upset your boss.

Night classes will be starting soon in the San Francisco area, so call us today for a free class schedule and more information on how you can get your CNE. Seating is very limited and will be guaranteed on a first serve basis.

CALL TODAY 1-800-447-3658
(LOCAL; 415-764-1400)

EVERNET
EDUCATION SERVICES
Los Angeles • San Francisco • Sacramento

PAM
PALO ALTO MICRO CORP
WE BEAT ANY COMPETITORS PRICE!!

NOW IN OUR 9TH YEAR OF BUSINESS!
HARD to FIND PARTS-- GOOD USED DEALS
All Prices Reflect Cash Discount
All prices and availabiltty subject to change W\O notice.
OPEN 9AM TO 6PM MON - FRI

CASE ANY KINDS
Mini -mid SUPER Tower Case W/PS- $35 -$52 -$77 !!
USED CASE & NO POWER SUPPLY - $11.50

CALL FOR ANY PC CARDS
SVGA - 256K - $24
SVGA - 512 K - $34
SVGA - 1MEG - $52
VLB 16 M.COLOR$73
ESDI 105/ SCSI 46/ MFM.35..RLL 36...
FAX PHONE SWITCH BOX..$75
CYRIX 387-33 MATH $24
CYRIX 486SX-33 CPU $72
COMPAQ COLOR lap lte25c.CALL

3483 EL CAMINO REAL
PALO ALTO, CA 94306
TEL:(415) - 493 - 8209
(415) - 493 - 7978
(415) - 493 - 8217
FAX:(415) - 493 - 4572

21" SONY MONITOR!
USED E/VGA $ 120 ask us PRICE!! 9" to 21" !!

HARD DRIVES!

210 MB , CONNER, ...$	157.00
250 MB, IBM........................ $	188.00
270 MB,QUANTUM..............$	199.00
420 MB, CONNER..............$	203.00
540 MB, ASSORTED,..........$	278.00
40 MB, RLL W/ CARD.........$	79.00

CD ROM -- SCSI -- DS -- $ 162 .00 -
SANYO / MEDIA VISIONS

MOTHER BOARDS

PENTIUM M\B ONLY, PCI , 100 MHZ	$365
486\ DLC , 33 MHZ , WITH CPU!!........	only $132
486\ DX \ DX2 M\B 256K cache..VLB...	only $ 85
486 SLC-33 MAIN BOARD AND CPU	$85.00
486 SLC2-50 IBM MAIN BOARD	146.00
486 SLC2-66 IBM MAIN BOARD	179.00
486 DX-100 MAIN BOARD 72/30 PIN	97.00
286 USED SYSTEM FROM	188.88
1.44 FLOPPY MITSUMI SPECIAL	27.88

1 MEG SIMMS - $34.50 256K SIMM - $ 10.50
16 MEG SIMMS $570 00 4 MB SIMM - $133 00
4 MEG - BEAT ANY 72 OR 30 PINS!!
INTEL CPU PULLER W\ BOX!.... .WOW! . $3.00

CPU'S Math Chip

486 DX2 /66 MHZ	$232
486 DX/ 33 MHZ ...	$125
PENTIUM 90 MHZ ...	$815
486 DLC /33 ONLY....	$ 62
386DX CPU FROM	$ 22

WE WILL BEAT ANY CPU PRICE!!
XT RLL CTL $ 35.0
20 MB MFM $25.0
Many hard to find parts in stock! !

1.08 GIG Corner, SCSI $595
all kinds of USED PARTS.. QUANTITIES AVAILABLE!!

California Resellers:

Take advantage of this free editorial listing!

Plan now to make the most of your peak selling season with the 1994 MicroTimes 6th Annual Buyers Guide!

By making sure you're listed in this year-round resource you will:

- Bring customers into your store during your most important selling season and throughout the following year. They'll see your message next to an exciting lineup of editorial features, including our own writers' picks for the best hardware and software products of 1994 and over thirty pages of Buyers Guide announcing new products and special offers—many of which you'll already have in stock, ready to sell!

- Showcase your store, products, and services by telling your potential customers about the unique service your business offers, your in-house experts, and the guidance they provide in such areas as LANs, multimedia, accounting, and other specialties.

- Benefit from our own special promotions of this exciting issue which will appear in October and November. MicroTimes will help you build the consumer excitement you need to ring up sales as you ring in the new year.

Special Vendor Authorized Listings! In addition to listing your store's name and other information alphabetically by geographical area, we also offer an additional feature to enable your prospective customers to find you quickly: **a separate directory of vendor-authorized sales, service, training, and support providers**. So if you're authorized to provide these services for Novell, IBM, Apple, Sun, Hewlett-Packard, or other name-brand products, please give us that information so we can include your name in the vendor-authorized listings.

To make sure you're part of this important resource, complete and sign the attached reseller poll form and mail or fax it back to us by Sept. 30, 1994. **If your store has more than one location, please use a separate form for each location** to generate the sales that will make your fourth quarter a success. Don't let this opportunity pass you by!

FOR ADVERTISING INFORMATION, CALL
(510)934-3700
***or* (213)851-8600.**

MICROTIMES 1994

6th Annual Buyers Guide Reseller Poll

Mail to: Reseller Poll, 3470 Buskirk Ave., Pleasant Hill, CA 94523
Fax: (510)934-7351
Deadline: September 30, 1994

Store Name: ______________________________

Store Manager: ______________________________

Address: ______________________________

City: ____________________**State:** _____**ZIP:** ________

Phone: ______________ **Fax:** ____________________

What does your business specialize in, and who are your in-house experts for each specialty? (e.g., multimedia, hardware, software, components, service)

List up to three:

Specialty	Expert

What software operating systems does your business support?

MS-DOS☐ Windows☐ UNIX (specify variety)___ O S / 2☐ Macintosh☐ Other (specify)____

What is your multimedia specialty?

CD Titles☐ Video☐ Desktop Publishing☐ Production☐ Hardware☐ Software☐ Software Development☐

List the three top-selling brands sold at your store in 1994:

____

What special value-added services (e.g., service, training, support, warranties, return policy, etc.) does your business offer? (Please keep responses under 25 words or we will edit them to fit available space.)

____

____

____

Are you a vendor-authorized sales, service, training, and/or support source?

If so, please list up to five vendors (e.g., Sun, Novell, Hewlett-Packard, Compaq) who have authorized your business to provide these services, and check the areas for which you're authorized.

Vendor	Sales	Service	Training	Support

I certify that all the statements made in this survey are true.

Name: ____________________ **Signature:** ____________________

Title: ____________________ **Date:** ____________________

OS/2 • BY FABIAN PASCAL

OS/2: Color Printing

More On HP's 1200C

Last month I discussed the installation and configuration of OS/2 printer drivers, specifically two IBM drivers for the Hewlett-Packard DeskJet 1200C color printer: a PostScript (PS) driver and a beta LaserJet driver, which talks PCL to the printer. PS and PCL are page definition languages by Adobe and Hewlett-Packard, respectively.

The difference between the basic and PS versions of the 1200C is a SIMM module which contains the PS interpreter. You can purchase the printer as 1200C/PS with the PS module preinstalled, or you can get the basic version and, should you so desire, add the PS module later (see below), which is very easy to do. The 1200C switches automatically between modes, based on the software and drivers.

Bitmaps Vs. Vectors

I first printed the OS/2 desktop using the PrntScrn key. In PCL mode the screen (reduced in size) took about two minutes to print, while with the PS driver the task took a little over twenty minutes!!! Interestingly, not only was the PCL printout crisper, but its color matches the screen display better too (the PS printout is somewhat greenish). This seems inconsistent with the prevailing notion that PS yields better print quality. But things are rarely straightforward in computing.

Opinions in the HPPERIPHerals forum on CompuServe were divided on the performance difference. To one, "PS is slow, but not THAT slow," while another opined that while "Twenty minutes vs. two minutes is maybe a little extreme" he "would hesitate to call it a sign of trouble." In another's own experience, "Photostyler images take over 30 minutes in PS mode, but under five minutes in normal (PCL) mode" on his LaserJet 4M. There was no disagreement, however, as to the reason for the difference:

•"A desktop snapshot is a bitmap image. PS does not like bitmap images; it treats each dot as a separate vector, generating a huge amount of information which takes a long time to print."

•"Bitmaps on a PS printer will be quite slow compared to vector printing; PCL is normally faster."

•"Postscript works best for vector images, such as CAD drawings, Freelance drawings, and text from Type 1 fonts."

OS/2 uses Adobe Type 1 fonts, so that should not cause performance problems in PS mode. The difference, both in print quality and speed, boils down to graphics. Which of the two page definition languages—PCL or PS—gives you better print quality and performance varies considerably with the kind of graphics you will print.

The popular graphics file formats, PCX or TIFF, are bitmap. As Charles Petzold puts it in *PC Magazine*, "Bitmaps often originate as real-world images captured through scanners or video frame grabbers...they store the image as a series of bits that correspond to the pixels of a display device... In a color bitmap, multiple bits are required for each pixel."

Vector files—e.g. PM metafiles—on the other hand "...are constructed by humans or computer programs. The metafile consists of a series of records that correspond to graphic function calls...to draw straight and curved lines, filled areas, and text."

In two previous articles, I argued that, given the concept behind Freelance, one would want to import into it images created elsewhere. Specifically, I wanted to import scanned press clips, and scanners produce bitmap files. Unfortunately, Freelance imports and displays only black-and-white TIFF files, which would be useless for color printing (besides, bitmap files tend to be very large, and importing the scanned clips into Freelance brought my system to its knees, despite its 18MB of memory).

If "drawing programs create metafiles," then Freelance's drawing module ought to create them, but that doesn't help with scanned images. Neither does Freelance's capability to import metafiles. Moreover: "Converting bitmaps to metafiles is a much more difficult task usually restricted to very simple images and requiring lots of processing power to analyze edges and outlines."

But I found a way, albeit roundabout and tedious. I scanned each clip into a PCX file, displayed it with the PMJPEG OS/2 image viewer and captured it to the clipboard with PrntScrn for OS/2 as a PM Clipboard metafile (both utilities were described in previous columns). I then pasted the metafile into a Freelance slide. I ended up with a presentation consisting of slides with imported color metafiles, as well as bullet slides created with Freelance containing Adobe Type 1 fonts.

Note: The PCX and TIFF formats vary across vendors (despite their being considered "standards") and the specific procedure of generating and converting the PCX files was necessary to make the whole thing work.

According to prevailing consensus, print quality should be better in PS mode with the above kind of presentations, and performance should not be much worse than in PCL mode.

Printing Freelance Presentations

First, I printed Freelance handouts (six slides/page) with either driver. In both cases the print colors were significantly darker than the screen display. The OS/2 PS

continued on page 304

HARD DRIVE & MEMORY SUPER SOURCE

At SCSI-Works, we understand that you want more than just a low price or just a cashier to assist you in your purchases. That's why we offer you the following:

SERVICE:

Better

- Specialized, knowledgeable and friendly sales team
- 15-Day money back guarantee
- 30-day D.O.A full exchange or credit
- To our corporate customers
- Fast account set up and approval
- Hassle-free ordering. (Simply fax in your P.O's to 510-494-8501, or quotations and we will do the rest, or call in directly and ask for our Corporate Dept.
- Gov't educational and fortune 1000 companies are pre-approved for NET Terms.
- Free Delivery, Same Day* (within 15 mile radius. On most orders.) Should you need assistance, call our tech support for fast and friendly advice. Our Tech's are dedicated to keeping you happy.

Bigger

- We Offer you the best brand-names in computer products, brand new with full factory warranty.

Affordable

- We offer you the most competitive pricing in the Industry. If you see it for less give us a chance to earn your business.

CORPORATE HDSS
Main (510) 494-8100
Fax: (510) 494-8501

INTERNATIONAL DEPT.
Call (510) 494-8121
Fax: (510) 494-8501

RMA DEPT.
Call (510) 494-8045
Fax: (510) 494-8501

CUSTOMER SERVICE
Call (510) 494-8125

1MB PC MEMORY 30-PIN SIMM MODULE

1MBx3/70ns $36
1MBx3/60ns $37
1MBx9/70ns $38
1MBx9/60ns $39

Prices subject to change

4MB PC MEMORY 30-PIN SIMM MODULE

4MBx9/70ns $141
4MBx9/60ns $143

Prices subject to change

4MB PC MEMORY 72-PIN SIMM MODULE

1x36/70ns $152
1x36/60ns $154

Prices subject to change

8MB 72-PIN MEMORY SIMM MODUAL

2x36/70ns $310
2x36/60ns $317

Prices subject to change

16MB 72-PIN MEMORY SIMM MODUAL

4x36/70ns $579
4x36/60ns $629

Prices subject to change

INTEL CPU'S

DX33 .... $249
DX2/66 ...... $299

Prices subject to change

INTEL PENTIUM CPUS

60MHz 479
66MHz $599
90MHz $729

Prices subject to change

Quantum™
540MB IDE 3.5" X 1"
°LPS540A
°12ms
°2-Year Warr.
540MB SCSI LPS540S .. $359
$315

Maxtor
547MB IDE 3.5" X 1"
•7546A
•12ms
•2-Year Warr.
$299

WESTERN DIGITAL
420MB IDE 3.5" X 1"
•WD2420-Caviar
•12ms
•3-Year Warr.
$239

IBM
728MB IDE 3.5" X 1"
•70G8850
•12ms
•5-Year Warr.
$459

Quantum™
1.08GB SCSI 3.5" X 1"
°EMPIRE 1080S
°5-Year Warr.
° 9.5ms
EXTERNAL $755
$649

MICROPOLIS NEW
1.0GB IDE OR SCSI 3.5"X1"
° MC4110A/S
°8.5ms
°5-Year Warr.
°5400RPM
1.0GB SCSI EXTERNAL $775
$639

Quantum™ JUST ARRIVED
1.4GB FAST SCSI-III 3.5"X1"
°EMPIRE 1400S
°9.5ms
°512K Cache
°5400RPM
°5-Year Warr.
EXTERNAL $999
$879

IBM INCREDABLE PRICE
1.0GB SCSI 3.5"X1"
°70G8492
°8.6ms
°5400RPM
°5-Year Warr.
FAST WIDE SCSI $799
$679

MICROPOLIS UNBEATABLE PRICE
1.75GB IDE OR SCSI
° MC2217A/S
°10ms
°5-Year Warr.
°3.5" Format
EXTERNAL $1049
$899

Seagate
2.1GB 3.5" SCSI
° ST12400N
°9ms *Fast*
°5-Year Warr.
EXTERNAL $1359
$1229

Seagate UNBEATABLE PRICE
2.1GB 3.5" FAST SCSI-II
BARRACUDA-II
°ST12550N
°8ms
°5-Year Warr.
°7200 RPM
°500,000 MTBF
EXTERNAL $1429
$1329

Quantum™ JUST ARRIVED
2.1GB FAST SCSI-III 3.5"
°Empire 2100S
°MTBF800,000 Hrs
°7200RPM
°512K Cache
°8.6ms
°5-Year Warr.
$1269

Seagate UNBEATABLE PRICE
9.0GB FAST SCSI-II
°ST410800N
°512K Cache / 11.5ms
°Fill Height
°5-Year Warr.
EXTERNAL $3950
$3750

IBM
4.0GB FAST SCSI-II
°0664-ESH
°<10ms
°1MB Dual Buffer Cache
°5-Year Warr.
EXTERNAL $2799
$2275

Maxtor
170MB IDE 3.5" X 1"
•7171A
•14ms
•1 Year Warr.
$159

Quantum™
270MB IDE 3.5"X1"
•LPS270A
•17ms
•3.5x1"
•2-Year Warr.
$199

HEWLETT PACKARD
Int. 1.3GB Optical Drive
•HP C1716T
•SCSI-II
•Multifunction Rewritable & WORM Drive
EXTERNAL W/CART. .. $2799
$2125

FUJITSU NEW
230MB Optical Drive
•2512A
•Low Profile 3.5"X1"
•3600RPM
•256K Cache
•5-Year Warranty
EXTERNAL W/CART. $999
$829

SyQuest UNBEATABLE PRICE
200MB Removable Drive
•Internal SCSI
•Unlimited Storage Capacity
•14ms Seek Time
•2-Year Warr.
External SCSI w/Cart. . $627
$459

Genuine SyQuest Cartridges

Item #	Capacity	Single	5-pack
SQ400	44MB	$63	$299
SQ800	88MB	$79	$399
SQ310	105MB	$59	$289
SQ327	270MB	$86	$415
SQ2000	200MB	$98	$465

PIONEER®
DRM602X Double Speed $729
6-Disk Mini CD ROM Changer
DRM604X Quad-Speed $999
6-CD ROM Magazine Changer
DRM1804X Quad-Speed $1950
18-CD Changer, 3 6-disk magazines, 300ms, 614Kb/Sec

NEC
3Xi Triple Speed CD ROM
•Internal SCSI-II CD ROM Drive
•450Kb/Sec
•190ms Seek
OEM CDR500
3Xe External ... $489
$415

TOSHIBA LOW PRICE
Internal SCSI CD-ROM Drive
•Internal XM3401B
•300Kb/200ms Bare Drive
•256K Cache
•Photo CD Compatible
•Caddy Included
External $365
$265

PLEXTOR Formerly TEXEL NEW
4-Plex QuadSpeed
•Internal PX-34CH
•600Kb/Sec
•220ms
•1MB Cache Buffer
•2-Year Warr
EXTERNAL $579
$479

HEWLETT PACKARD
EXternal 4-8GB Tape Backup
°INxternal 35480A
°Internal Drive
°Uses 4mm DAT Tapes
°1 Year Warr.
°Hardware compresion
Internal $979
$1069

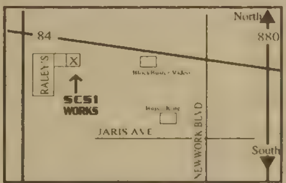
EXABYTE®
4.0GB SCSI Tape Backup Kit
•Internal EXB-4200C
•3.5"
•USES 4MM DAT cart.
External Kit $1009
$899

ARCHIVE VIPER
250MB SCSI Ext. Tape Backup
•2150S
•up to 6MB/Min Throughtput
•Uses 1/4" Tapes
•While Supplies Last •
$299

SCSI-WORKS
COMPUTER PRODUCTS
THE HARD DRIVE SPECIALISTS!

Price Subject to change. Not responsible for typographical errors.

(510) 494-8100
FAX (510) 494-8501
6225 Jarvis Ave.
Newark, CA, 94560
M-F:9 -7; Sat 10a-5pm;Sun 10-4



CORPORATE DEPARTMENT
Corporate, Dealer, Government, Educational, & International
(510) 494-8100

DISCOVER VISA AMERICAN EXPRESS MasterCard P.O.'s

PRECISION GRAPHICS (408) 249-0290

BY WOODY LISWOOD

Keeping Track Of Your Work Force

Abra 2000 Human Resource Management System Allows Users To Better Record And Organize All Employee Information

Several years ago, my preferred PC-based human resource information systems (HRIS) software was a package costing $9500. That has all changed with the Abra 2000, a surprisingly capable HRIS that costs around $1500 for the unlimited employee version. If you only have a few employees, less expensive versions are available.

Abra 2000 accomplishes everything you would want in HRIS—it does this equally well for companies with only a few employees up to those with fifteen hundred employees. A company larger than that might want to consider one of the more powerful (and more expensive) programs. If your company is small but growing, Abra 2000 will satisfy your human resource needs well into the future.

I have used Abra 2000 to keep track of a 363-employee ski area, with the accompanying turnover you might expect in the resort industry—no hitches, no glitches, just solid performance.

Basic Resource Needs

In the world of human resources, the basic need is to track every employee—with their current, correct information—so that you can comply with an array of government regulations.

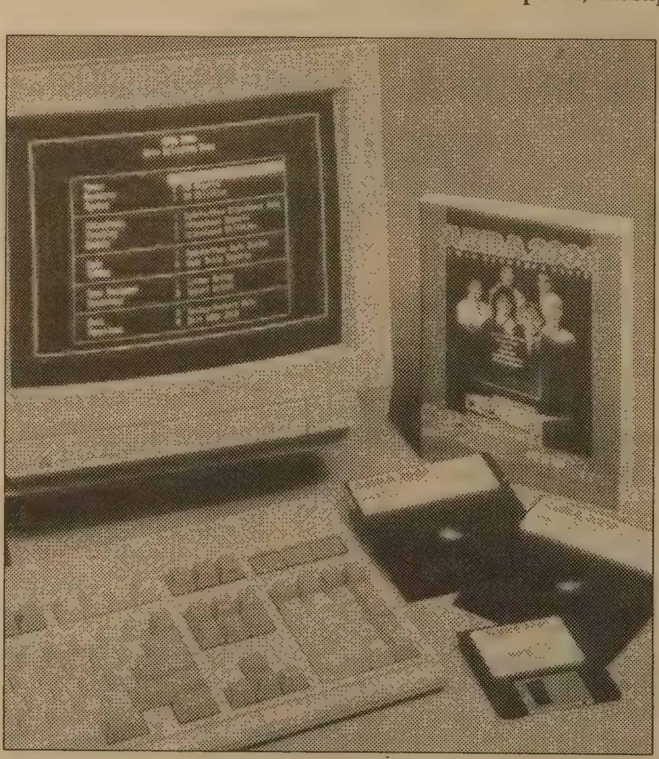
If you haven't experienced them, EEO (Equal Employment Opportunity) and OSHA (Occupational Safety and Health Act) reporting requirements can be a business owner's nightmare. Abra 2000 helps keep down the costs associated with meeting these regulations. It manages the data you will need to complete the necessary reports—that, by itself, is why your Human Resource department should be using this software.

> Information about dependents is handled well—if in some what more detail than you might otherwise keep.

How It Works

Abra 2000 is configured as a series of databases with most of the relationships built into the accompanying code and report writer.

It keeps events, such as training programs, in a separate database using the employee number as the key for the relationship. Finding who has attended the new employee orientation program is no problem, a simple query answers the question. Unfortunately, it does not report the negative—who has not attended. An outside report writer can give this information, but this is something that should be available as a custom report from within the Abra 2000 structure. (I complained to customer service, so maybe it will be offered in a future release.)



Abra 2000 presents a variety of screens and coded tables, which give a wealth of information as well as flexibility in customizing the program for your business. On each of the main two employee screens, basic and job information, there are extra fields that can be customized.

Comparatios are statistics that most human resources and compensation professionals use to track salaries in relationship to salary plans or labor markets. If you desire, comparatios are calculated automatically, along with length of service. In Abra 2000, a comparatio is shown on the job screen as salary divided by range midpoint, multiplied by one hundred. In various reports, a comparatio is calculated based on division, department, or even location.

In addition to the main information screens, a complete job history is automatically kept. This is probably the screen I use most. I often need to look up what happened last year to a particular employee, and with Abra 2000 I can quickly check the records.

At the ski area, a second job screen is also useful. We have many employees who work in more than one department. With both job screens I can easily track everyone's job assignments and know who did what and when they did it.

Job codes are tabled, and let you add the required EEO and other coding information. Salary ranges are also coded and can be linked to optional or required tables for lookups in the job section. This is definitely an impressive feature.

The only complaint I had with the main Abra 2000 body of information is that the

continued on page 308

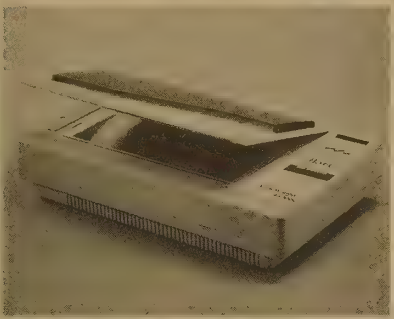
InterPro Delivers Unbeatable PC & Scanning Values !!!

ARTEC

FLATBED SCANNERS

ViewStation / A6000c $ 499

Capturing A Splendid Fairyland Of Brilliant Colors



Advanced Features?
You name it, we have it, plus more

- * Up to 2400 dpi resolution.
- * Line art, halftone, 256 grayscales, and 24-bit True color (16.8 million colors)
- * Extraordinarily long-lasting Cold Cathode Fluorescent Lamp
- * TWAIN compliant
- * SCSI II interface for faster communication
- * Intelligent LCDs for status display

Optional Accessories & Softwares:

- * Transparency kit - Perfect for scanning X-rays, slides, and transparencies
- * Media House multimedia document manager
- * Powerful PhotoStacker Pro imaging software & Go-Cr (OCR software)
- * PhotoShop LE

ARTEC

The World's Fastest Handheld Color Scanner

ViewScan / Color 16 M $ 229

Convenient, Compatible, Competitive

- * Up to 800 dpi resolution
- * Line art, halftone, and true 256 grayscales
- * 24-bit true color (16.8 million colors)
- * TWAIN complaint
- * Powerful PhotoStacker Pro, and Go-Cr (OCR software)
- * Patented Auto Missing Line Detection & Compensation

IMAGING MAGAZINE EDITORS' CHOICE

ViewScan 256s-400

$ 89

Best Buy

- * TWAIN compliant
- * Up to 400 dpi resolution,
- * Text / Image, True 256 grayscales
- * PhotoFina L.E., Go-Cr (OCR)
- * 16-bit AT bus interface adapter
- * Patented Missing Line Compensation

ViewScan 256s-800

Special Offer to your Desktop PC !!

$ 109

- * Up to 800 dpi resolution
- * TWAIN compliant
- * 16-bit AT bus interface adapter
- * Line art, halftone, and true 256 grayscales
- * Powerful PhotoStacker Plus & Go-Cr (OCR)
- * Patented Auto Missing Line Compensation

ARTEC

Portable Scanners

WalkScan 256s Laptop Scanner $159

The incredible WalkScan 256s brings **Portability** to true grayscale scanning

- * Up to 800 dpi resolution
- * Line art, halftone, and true 256 grayscales
- * TWAIN compliant
- * Powerful PhotoStacker Plus image editing software and Go-Cr (OCR software)
- * Parallel port and A/C adaptor
- * Patented Auto Missing Line Detection & Compensation

*** Rechargeable Battery** (Optional) $ 49

Truly portable without searching for power outlet

ARTEC Mouse Family:
AM-140, AM-230, AM-260, AM-310, AM-360, AM-380, AM-740

OEM Mouse Family:
LE-170, LE-180, LE-270, LE-280, LE-520

$ Call

OEM/ODM & Distributors Welcome

MediaHouse

Media House CD $79

Media House is an office automation tool that makes the paperless office a reality.

- * It establishes electronic file cabinets, folders for sorting,organizing and retrieving your media files.
- * It suports AVI, MIDI, Wave, Kodak Photo CD, Tiff, BMP, TGA, PCX, JPEG, FLI and other popular file formats.

Media House CD Software Included: (5 PCS 31/2" Floppy Disk)
Program Files: Media House & PhotoStacker Plus software.
Sample Files: Aris, JPEG, PCD, TGA, TIF, WMF-Images, BMP Slides, AVI (motion video), WAV Sound files (8 & 16 bit).

Motherboard & CPU Upgrades: Speed up your machine. AT *InterPro*

Quality, Service and Value !! *Call for update price & other Peripheral Component*

SUPERMICRO

DIGICOM NiCE ACHME BIOSTAR GROUP ASUS, IBM

Advanced Integration Research Inc.

A.I.R: Northern California Distributor (made in U.S.A)	MB	MB+CPU	Barebone +0MB
Dual P54CDP-90/100MHz 256/512KPCI/EISA,Fast&Wide SCSI-2...	**$895/935**	$ Call	$ Call
P54**CEP**-90/100MHz 256/512K PCI/EISA, Fast&Wide SCSI-2..........	**$755/795**	$ Call	$ Call
P54**CMI**-90/100MHz 256/512K PCI/ISA/VLB, Fast&Wide SCSI-2...	**$455/495**	$ Call	$ Call
P586**BEP**-60/66MHz 256/512K PCI/EISA, Fast&Wide SCSI-2, I/O...	**$599/635**	$ Call	$ Call
P586**BMI**-60/66MHz 256/512K ISA/VL-Bus, IDE/IO, 2S/1P...........	**$345/379**	$ Call	$ Call
Super **P54VL**-90/100MHz 256/512K PCI/ISA/VLB, 3.3V CPU.......	**$449/489**	$ Call	$ Call
Super **P5VL**-60/66MHz 256/512K PCI/ISA/VLB, L2 Cache...........	**$359/399**	$ Call	$ Call
Super **P5VESA-II**-66/60/50/33Mhz 256/512K ISA/VLB, L2 Cache...	**$325/368**	$ Call	$ Call
DIGI P5-PCI-90/100MHz 256/512K PCI/ISA, IDE/IO, 2S/1P..........	**$455/489**	$ Call	$ Call
IBM 486SLC2-66MHz 64K Cache, ISA/VLB............................	N/A	**$ 219**	$ Call

Also available for all 386/486 models, PLEASE CALL for lowest price.

InterPro Microsystem Inc.

YOUR BEST SOURCE FOR IMAGE PROCESSING

Hours of Operation: M-F 7:00 a.m. - 6:00 p.m.
Saturday: 9:00 a.m. - 3:00 p.m. PST

800-226-7216

Customer Service:(510) 226-7226FAX:(510) 226-7219
46750 Fremont Blvd Suite 104.
Fremont CA 94538

No surcharges on Visa & Master Card. P.O. subjects to approval. All returned items must have a copy of the invoice, must be in the original packaging, and the RMA number on outside of the box. Shipping rates vary. Call for exact amount. 30 day money back guaranted.
Shipping & Handling is non-refundable.
Return items for refund are subject to 15% restocking fees.
Price and availability are subject to change wihtout notice.
Not responsible for typographical errors.

Under a
Killing
Moon
Under a
Killing
Moon

Under A Killing Moon:

Heading Into The Uncharted Territory Of CD-ROM Movies

By Michael Robin

Cover And Coverstory Photo By Greg Allen

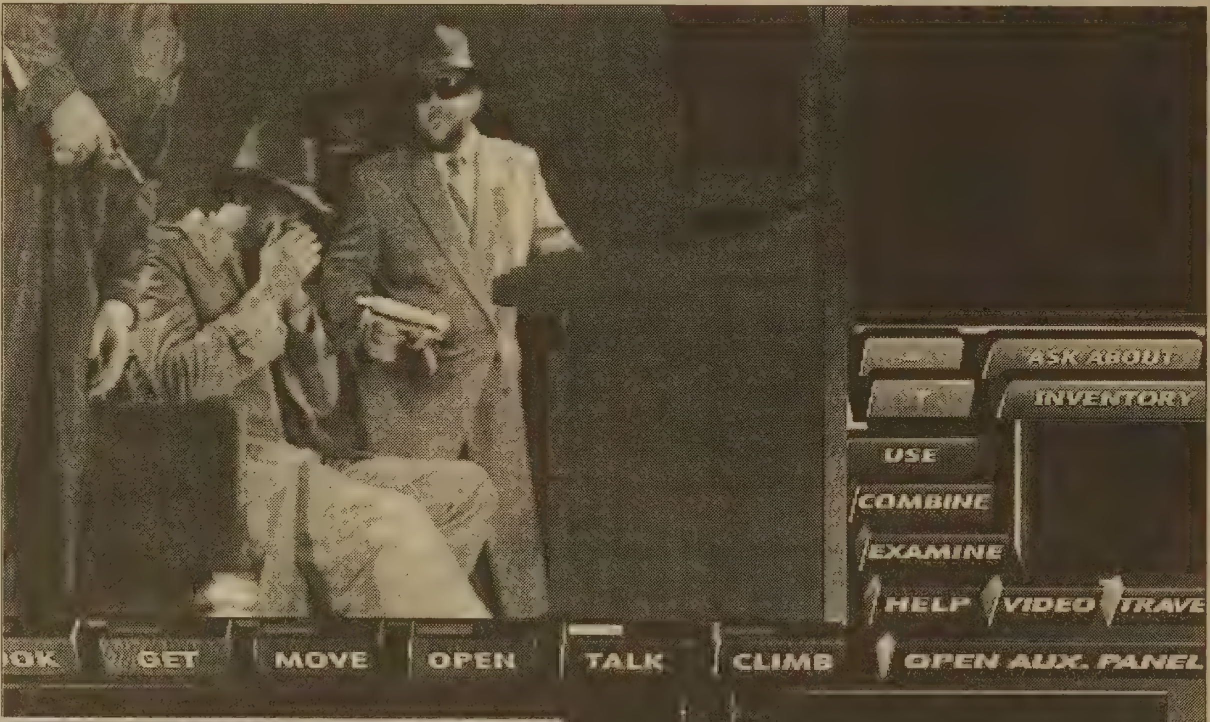
An Interview With Chris Jones Of Access Software

Interactive CD-ROM movies represent the convergence of movies and the multimedia PC, giving you the drama and excitement from movies with the opportunity to affect the events on your screen. For many in both of these industries, this also holds the promise of becoming the next alternative in home entertainment, taking its place next to the television and VCR.

Killing Moon *continued*

Last month, a group of about one hundred people was invited to the Academy of Motion Picture Arts and Sciences, in Beverly Hills, to see the latest movie of this genre. Under a Killing Moon, by Access Software, fills four CDs and includes close to three and a half hours of video. But more impressive than the sheer size of this DOS-based software package, is the attention to detail this Salt Lake City, Utah-based software game and entertainment company paid when creating its first interactive CD-ROM movie. With a budget over $2 million, Access was able to attract widely recognized and respected professional actors—Brian Keith, Margot Kidder, Russell Means, and James Earl Jones. Complementing the acting, Access has created a complex world for you to enter; a world whose detail and flexibility make it surprisingly realistic.

Set in the year 2045 in San Francisco, Under a Killing Moon takes you into a virtual world where you become Tex Murphy, private investigator. An opening ten-minute movie introduces you to Tex and sets up the beginning of your adventure. You see Tex flying through the city in his "speeder" vehicle; hear him describe what he is thinking and what he is feeling just before the game starts. There are also flashback sequences that give some history of what you are going to be involved with.



After this introduction, you play the character Tex—guide him through the city, influence the dialogue, search for clues, and view much of these events through his eyes. Tex is hired to find a missing statuette, but once he finds it, he is knocked out and the statuette vanishes again. As his search continues, Tex finds himself chasing the members of a cult bent on destroying the world, finding a computer chip capable of tremendous destruction, and, finally, solving the crime.

Interactive CD-ROM movies offer the potential for combining the best of Hollywood with the best of Silicon Valley. In this situation, Hollywood represents the accumulated wealth of knowledge for telling a story visually as well as the accumulated financial wealth from the movie industry as companies such as Time Warner, Disney, and Sony invest heavily in the new medium of digital home entertainment. On the other hand, Silicon Valley offers the technology, both hardware and software, to bring interactivity to digital entertainment along with the creative entrepreneurial forces found in smaller, leading-edge high-tech companies. The result is to offer the viewer an active role in digital home entertainment—something far more interactive than the remote control of the television or VCR and a higher level of entertainment than shoot-'em-up or dungeons-and-dragons software games.

The day of the premiere I met with Chris Jones, cowriter, director, lead character in Under a Killing Moon—as well as being executive vice president and partner at Access Software— to discuss his thoughts and goals in making interactive movies, the convergence of Silicon Valley and Hollywood, and prospects for this alternative form of home entertainment.

What is the difference between your earlier computer games and this new CD interactive movie?

When we initially started this, which was just about two years ago, we said, "OK, we want to fuse the movie and the idea of the game together to come up with an alternative form of entertainment that could be judged along the same lines of, say, a movie or TV entertainment.

"The computer can do certain things, movies do certain things. Let's combine them to come up with an entertainment piece that features the strengths of both and tries to get out the negatives. With movies, you are watching them as a passive, two-dimensional experience. People tend to look at computers as either a hassle to deal with or childish or, maybe, 'This isn't really what I want to do for entertainment, I don't want to think that hard. I want the computer to do things for me.'

"But with the computer, if we do things correctly, we can bring a three-dimensional aspect into the entertainment experience. We want to give people an emotional tie and a feeling that they're becoming part of this space that we are creating for them."

For the user or audience, what does this new entertainment experience involve? There are several different ways to play this movie...

When we did Mean Streets five years ago, the technology was not quite coming up to spin. We could make the character talk, but not very much. He could have a few words. But in general, because of memory constraints, we could not do as much as we would have liked to do.

We decided to make [Under a Killing Moon] a CD. We were not going to worry about a disk-based product or anything else. We concentrated totally on what the CD is able to do, which is much more storage. Right off the bat, this

MULTIMEDIA SYSTEMS

BUILT-IN SPEAKERS

100MHz
w/8MB RAM, 500 MB HDD CD, Sound Card, & Speakers

- Intel 80486DX4-100MHz CPU
- VESA Local Bus Motherboard wtih 256K Cache
- 8MB Memory Expandable to 64MB
- 1.2MB & 1.44MB Floppy Drive
- 500MB Hard Disk Drive
- Double Speed Internal CD-ROM
- 16 Bit Sound Card
- VESA Local Bus Hard/Floppy Disk Controller w/2S, 1P, & 1G Ports
- VESA Local Bus SVGA Card w/1MB
- 15" SVGA Monitor with built in Speakers
- 101 Key Enhanced Keyboard
- 3-Button Serial Mouse
- MS Windows 3.1
- MS DOS 6.21

$2395

66MHz
w/8MB RAM, 420 MB HDD CD, Sound Card, & Speakers

- Intel 80486DX2-66MHz CPU
- VESA Local Bus Motherboard wtih 256K Cache
- 8MB Memory Expandable to 64MB
- 1.2MB & 1.44MB Floppy Drive
- 420MB Hard Disk Drive
- Double Speed Internal CD-ROM
- 16 Bit Sound Card
- VESA Local Bus Hard/Floppy Disk Controller w/2S, 1P, & 1G Ports
- VESA Local Bus SVGA Card w/1MB
- 14" SVGA Monitor with built in Speakers
- 101 Key Enhanced Keyboard
- 3-Button Serial Mouse
- MS Windows 3.1
- MS DOS 6.21

$1825

66MHz
w/420MB HDD, CD, Sound Card, & Speakers

- Multimedia Case with built-in Amplifer & Speakers
- Intel 80486DX2-66MHz CPU
- VESA Local Bus Motherboard wtih 256K Cache
- 4MB Memory Expandable to 64MB
- 1.2MB & 1.44MB Floppy Drive
- 420MB Hard Disk Drive
- Double Speed Internal CD-ROM
- 16 Bit Sound Card
- VESA Local Bus Hard/Floppy Disk Controller w/2S, 1P, & 1G Ports
- VESA Local Bus SVGA Card w/1MB
- 14" SVGA Non-Int. Monitor .28dp
- 101 Key Enhanced Keyboard
- 3-Button Serial Mouse
- MS Windows 3.1
- MS DOS 6.21

$1695

EXCLUSIVE OPTIONS

2MB SVGA VESA Adapter (1280x1024)	$150
Video Blaster Video Capture Board	250
Image Pals Image Capture Sofftware	60
Fax/Modem 14.4 (w/Bitcom & BitFax)	95
Triple Speed CD-ROM	CALL

intel inside

VISA

MasterCard

BOLData
SYSTEMS

1-800-923-BOLD Fax: 510-490-9428

The Intel Inside logo is a registered trademark of Intel Corporation.

Prices subject to change without notice. Not responsible for typographical errors.

Symphony
COMPUTERS™

FULLY FEATURE

▷▶▷NOT TH

INFINITY-2000 Authorized Dealers
Los Angeles • Riverside • San Diego
Modesto • Sacramento • Santa Clara

IN PC EXPERIENCE 7 YRS.

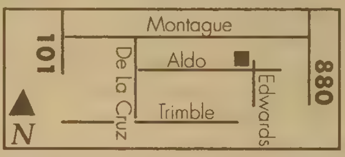
BEST BUY 1994

energy EPA POLLUTION PREVENTER

intel inside

BBB

Microsoft® WINDOWS Compatible



Symphony
COMPUTERS™

3460 Edward Ave.
Santa Clara, CA 95054
Tel: (408) 980-8325
Fax: (408) 980-8327
Mon-Fri: 9:30AM - 6:30PM
Sat: 11:00AM - 5:00PM (Sales)
Sun: 11:00AM - 4:00PM

Southern California Location:
9620 E. Las Tunas Drive
Temple City, CA 91780

VISA MasterCard AMERICAN EXPRESS DISCOVER

*Call Store For Complete Details
Prices, Specifications, Terms & Conditions are subject to change without notice. Not responsible for typographical errors. Prices good with this ad only.

INFINITY-2000™
ACTION G SERIES

- ▲ ACTION GREEN S71 Turbo Mainboard **(GREEN PC)** w/Zif socket
- ▲ Pentium OverDrive P24T Support
- ▲ 486 Processor
- ▲ 487 Math Co-processor Built-in
- ▲ **256K** Cache
- ▲ Supports 30pin & 72pin Simm Modules for flexible and economical upgrade.
- ▲ 4MB RAM Installed **60NS**
- ▲ NEC 1.44MB 3.5″ Drive
- ▲ **425MB** 12MS IDE Hard Drive
- ▲ VESA LOCAL BUS IDE w/2S, 1P, 1G Port
- ▲ Windows Accelerator VLB Video Card w/1MB
- ▲ 14″ Non-Interlaced SVGA Color Monitor .28 (Edge to Edge)**(Green)**
- ▲ DELL 101 Enhanced Keyboard
- ▲ DELUXE Medium Tower w/UL 230W Power Supply

energy EPA POLLUTION PREVENTER

SUPER BUY!

Action G IV	**486DX4-100 (Intel)**	**$1498**
Action G III	**486DX2-66 (Intel)**	**$1098**
Action G IA	**486DX-40 (AMD)**	**$1028**

INFINITY-2000™
ACTION G MULTIMEDIA SERIES

- ▲ ACTION GREEN S71 Turbo Mainboard **(GREEN PC)** w/ Zif socket
- ▲ Pentium OverDrive P24T Support
- ▲ 486 Processor
- ▲ 487 Math Co-processor Built-in
- ▲ **256K** Cache
- ▲ Supports 30pin & 72pin Simm Modules for flexible and economical upgrade.
- ▲ 4MB RAM Installed **60NS**
- ▲ NEC 1.44MB 3.5″ Drive
- ▲ **425MB** 12MS IDE Hard Drive
- ▲ VESA LOCAL BUS IDE w/2S, 1P, 1G Port
- ▲ Windows Accelerator VLB Video Card w/1MB
- ▲ 14″ Non-Interlaced SVGA Color Monitor .28 (Edge to Edge)**(Green)**
- ▲ DELL 101 Enhanced Keyboard
- ▲ DELUXE Medium Tower w/UL 230 Power Supply

SUPER SALE!

energy EPA POLLUTION PREVENTER

ACTION MULTIMEDIA PACKAGE:

- • 16 Bit Recording & Playback Sound Card, Stereo
- • Fast Double Speed CD-ROM Drive (250MS; 350KB)
- • MPC , Photo CD Multisession Compliant
- • Super Power 80W Stereo Speakers
- • Mouse & Mouse Pad

SUPER BUY!

Action G Media IV	**486DX4-100 (Intel)**	**$1698**
Action G Media III	**486DX2-66 (Intel)**	**$1298**
Action G Media IA	**486DX-40 (AMD)**	**$1138**

INFINITY-2000™
GREEN PYTHON™ SERIES

- ▲ GREEN PYTHON™ 486 Advanced Mainboard
- ▲ EPA "ENERGY-STAR" Power Management (GREEN PC)
- ▲ Pentium OverDrive P24T / 486DX4-100MHz CPUs Support
- ▲ Intel 486 Processor
- ▲ ZIF SOCKET (Zero Insertion Force)
- ▲ **256K** Fast Cache Upgradable to 1MB
- ▲ Support 72pin Modules in Multiple Configuration for Flexible and Economical Upgrade
- ▲ **8MB** RAM Ultra Fast 72pin Module Expandable to 128MB **60NS**
- ▲ New GREEN PYTHON™ GUI Engine 5434 Screaming 64 Bit Graphics Accelerator w/2MB RAM, 16 Million True Colors
- ▲ Super VL-BUS Ultra Fast IDE w/2S, 1P, 1G Port
- ▲ NEC 1.2 & 1.44 Drives
- ▲ **15″** Non Interlaced .28 **(GREEN)** (1280x1024)
- ▲ **425MB** 12MS IDE Hard Drive
- ▲ DELL 101 Enhanced Keyboard
- ▲ Ultra Medium Tower Case w/250W Power Supply

intel inside

NEW 64 Bit Graphics 2MB

BEST BUY!

energy EPA POLLUTION PREVENTER

Green Python IV	**486DX4-100 (Intel)**	**$1898**
Green Python III	**486DX2-66 (Intel)**	**$1498**

INFINITY-2000™
ACTION PCI-486 SERIES

- ▲ PCI 486 Motherboard
- ▲ Intel 486 Processor
- ▲ Zif Socket (zero insertion force)
- ▲ 487 Math Co-processor Built-in
- ▲ **256K** Cache
- ▲ **8MB** RAM Installed
- ▲ NEC 1.44 Drive
- ▲ **425MB** 12MS IDE Hard Drive
- ▲ **PCI IDE** Hard Drive Controller
- ▲ **GREEN PYTHON™** PCI GUI Engine 5434 Screaming 64 Bit Graphics Accelerator w/**2MB** RAM, True 16 Million Colors
- ▲ **15″** Non-Interlaced .28 (GREEN) (1280x1024)
- ▲ DELL 101 Enhanced Keyboard
- ▲ DELUXE Medium Tower w/UL 230W Power Supply

NEW Screaming 64 Bit PCI Graphics 2MB

intel inside

Action PCI IV	**486DX4-100**	**$1948**
Action PCI III	**486DX2-66**	**$1548**

INFINITY-2000™
ACTION P5 ADVANCED SERIES

- ▲ PCI 586 Pentium Motherboard
- ▲ Intel Pentium 586 Processor
- ▲ **256K** Cache
- ▲ **8MB** RAM Installed
- ▲ NEC 1.44 Drive
- ▲ **540MB** 11MS IDE Hard Drive
- ▲ **PCI IDE** Controller
- ▲ **GREEN PYTHON™** PCI GUI Engine 5434 Screaming 64 Bit Graphics Accelerator w/**2MB** RAM, True 16 Million Colors
- ▲ **15″** Non-Interlaced .28 **(GREEN)** (1280X1024)
- ▲ DELL 101 Enhanced Keyboard
- ▲ ULTRA Medium Size Tower w/UL 250W Power Supply

intel inside

pentium PROCESSOR

NEW Screaming 64 Bit PCI Graphics 2MB

Action P5	**PENTIUM 66**	**$2138**
Action P5	**PENTIUM 60**	**$1988**

INFINITY-2000™
ACTION G P5 SUPER 9

- ▲ Super 586 Pentium Motherboard
- ▲ Made in USA
- ▲ EPA "Energy Star" Power Management (GREEN)
- ▲ AMI Flash Bios
- ▲ 4 PCI BUS Master, 2 VESA Slots
- ▲ Intel Pentium 586 90MHz Processor
- ▲ 512K Cache
- ▲ 8MB RAM Installed
- ▲ NEC 1.44 Drive
- ▲ **540MB** 12ms IDE Hard Drive
- ▲ PCI IDE Controller
- ▲ **GREEN PYTHON™** PCI S3 Screaming 64 Bit Graphics Accelerator w/**2MB** RAM, True 16 Million Colors
- ▲ 15″ Non Interlaced .28 (Edge to Edge) (1280x 1024)
- ▲ DELL 101 Enhanced Keyboard
- ▲ Ultra Medium Tower Case w/250W (UL) Power Supply

intel inside

energy EPA POLLUTION PREVENTER

NEW Screaming S3-64 Bit PCI Graphics 2MB

BEST BUY!

Action P5 Super 9	**PENTIUM 90**	**$2398**

• UNDER PRICED
OTHER WAY AROUND

Lifetime Labor &
*3 Year Parts Warranty**

INFINITY-2000™
GREEN PYTHON™ M² ADVANCED

- ▲ GREEN PYTHON™ 486 Advanced Mainboard
- ▲ EPA "ENERGY-STAR" Power Management (GREEN PC)
- ▲ Pentium OverDrive P24T / 486DX4-100MHz CPUs Support
- ▲ Intel 486 Processor
- ▲ ZIF SOCKET (Zero Insertion Force)
- ▲ **256K** Fast Cache Upgradable to 1MB
- ▲ Support 72pin Modules in Multiple Configuration for Flexible and Economical Upgrade
- ▲ **8MB** RAM Ultra Fast 72pin Module Expandable to 128MB **60NS**
- ▲ New **GREEN PYTHON™** 64 Screaming 64 Bit Graphics Accelerator w/**2MB** RAM, 16 Million True Colors
- ▲ Super VL-BUS Ultra Fast IDE w/2S, 1P, 1G Port
- ▲ NEC 1.2 & 1.44 Drives
- ▲ **15" Viewsonic** 15EX (Low Radiation) Non Interlaced .28 (GREEN)
- ▲ **540MB** 12MS IDE Hard Drive
- ▲ DELL 101 Enhanced Keyboard
- ▲ Ultra Full Tower Case w/UL 250W Power Supply

NEW 64 Bit Graphics 2MB

M² ADVANCED PACKAGE:

- Original Sound Blaster SCSI-2 (Stereo) Sound Card
- Fast Triple Speed CD-ROM Drive (195ms, 450KB)
- Photo CD, Multisession Compliant
- Super Power 80W Stereo Speakers
- Free Microsoft Mouse & Mouse Pad

Plus Popular CD titles!

M² Advanced IV	**486DX4-100 (Intel)**	**$2788**
M² Advanced III	**486DX2-66 (Intel)**	**$2388**

SOUND CARDS

Media Magic 16 (Stereo)	**$68**
Sound Blaster 16 Basic Value Edition	**$98**
Sound Blaster MCD 16	**$138**
Sound Blaster SCSI-II 16	**$148**

CD TITLES

10% OFF ALL CD TITLES

- Seventh Guest
- Quantum Gate
- Mega Race
- Mad Dog McCree
- F-15 Strike Eagle III
- Day of the Tentacle

......Many More CD Titles

CD ROM DRIVES

Mitsumi 2x speed 250ms	**$128**
NEC 3x speed 190ms (512)	**$338**

TOSHIBA · adaptec · AMD · NEC · intel · ORCHID · HEWLETT PACKARD · MITSUMI

INFINITY-2000™
S71 TURBO

486 LOCAL BUS MOTHERBOARD W/256K FAST CACHE MAX 1MB

CPU SUPPORT: Intel, AMD, CYRIX, 486SX/DX/DX2/DX4/P24T with zif socket (zero insertion force)
MEMORY SUPPORT: Up to 128MB (30pin and/or 72pin Simms)
EXPANSION SLOTS: 3-VESA (32) Slots, 4 ISA (16) Slots
GREEN: Support Power Management (GreenPC)
WARRANTY: Full Two Years, Parts & Labor

$89
LISTED $128⁰⁰

SUPER MICRO
SUPER P54VL-PCI 512K CACHE

EPA POLLUTION PREVENTER

586-P5 GREEN VL-PCI BUS MAINBOARD W/512K CACHE MAX 1MB

CPU SUPPORT: Intel P-5 90MHz/100MHz
MEMORY SUPPORT: Up to 128MB (72 Pin Simms)
EXPANSION SLOTS: 4 PCI, 2 VESA, 3 ISA slots
GREEN: Support Power Management (GreenPC)
BIOS: AMI Flash Bios
WARRANTY: Full One Year Parts & Labor

MADE IN USA

$398
LISTED $458⁰⁰

INFINITY-2000™
ACTION G P-5 SUPER 9 MULTIMEDIA

- ▲ Super 586 Pentium Motherboard
- ▲ Made in USA
- ▲ EPA "Energy Star" Power Management (Green)
- ▲ AMI Flash Bios
- ▲ 4 PCI Bus Master, 2 VESA slots
- ▲ Intel Pentium 586 90MHz Processor
- ▲ 512K Cache
- ▲ 8MB RAM Installed
- ▲ NEC 1.44 Drive
- ▲ **540MB** 12MS IDE Hard Drive
- ▲ PCI IDE Controller
- ▲ **Green Python™** PCI S3 Screaming 64 Bit Graphics Accelerator w/2MB RAM, True 16 Million Colors
- ▲ 15" Non Interlaced .28 (Edge to Edge) (1280x1024)
- ▲ DELL 101 Enhanced Keyboard
- ▲ Ultra Medium Tower Case w/250w (UL) Power Supply

NEW Screaming S3 64 Bit PCI Graphics 2MB

SUPER MULTIMEDIA PACKAGE

- 16 Bit Recording & Playback Sound Card
- Fast Double Speed CD ROM Drive (250ms, 350KB)
- MPC, Photo CD Multisession Compliant
- Super Power 80W Stereo Speakers
- Microsoft Mouse & Mouse Pad

Action P5 Super 9 Multimedia	**Pentium 90**	**$2688**

INFINITY-2000™
GREEN PYTHON™ M² PRO

- ▲ GREEN PYTHON™ 486 Advanced Mainboard
- ▲ EPA "ENERGY-STAR" Power Management (GREEN PC)
- ▲ Pentium OverDrive P24T/ 486DX4-100MHz CPUs Support
- ▲ Intel 486 Processor
- ▲ ZIF SOCKET (Zero Insertion Force)
- ▲ **256K** Fast Cache Upgradable to 1MB
- ▲ Support 72pin Modules in Multiple Configuration for Flexible and Economical Upgrade
- ▲ **8MB RAM** Ultra Fast 72pin Module Expandable to 128MB
- ▲ New GREEN PYTHON™ GUI Engine 5434 Screaming 64 Bit Graphics Accelerator w/2MB RAM, 16 Million True Colors
- ▲ Super VL-BUS Ultra Fast IDE w/2S, 1P, 1G Port
- ▲ NEC 1.2 & 1.44 Drives
- ▲ **15"** Non Interlaced .28 (GREEN)(1280x1024)
- ▲ **540MB** 12MS IDE Hard Drive
- ▲ DELL 101 Enhanced Keyboard
- ▲ Ultra Medium Tower Case w/250W Power Supply

M³ PRO PACKAGE:

- Original Sound Blaster 16 MCD (Stereo) Sound Card
- Fast Double Speed CD ROM Drive (250MS, 350KB)
- Photo CD, Multisession Complaint
- Super Power 80W Stereo Speakers
- Free Microsoft Mouse & Mouse Pad

Plus Popular CD Titles

M² PRO IV	**486DX4-100 (Intel)**	**$2288**
M² PRO III	**486DX2-66 (Intel)**	**$1888**

MONTHLY SPECIALS

MONITORS

Arche 15" Non-Interlaced .28 (1280)	**$298**
Arche 17" Non-Interlaced .26 (1280)	**$588**

PRINTERS

HP DeskJet 520	**$298**
HP DeskJet 560c	**$568**
ALPS LSX1000	**$1188**

- 10 pages per minute
- 600 x 600
- Postscript & PCL 5e
- 2MB RAM, exp to 34MB
- 3 Year factory warranty

MODEMS

Digicom 14.4 Fax + Modem INT	**$79**
Digicom 14.4 Fax + Modem + Voice INT w/Turbo	**$99**
Digicom 28.8 Fax + Modem INT	**$188**

(Made in USA • Milpitas • 5 Year Warranty)

SPEAKERS

Super Power 80W (Multimedia)	**$39**

HARD DRIVES

Western Digital 425MB IDE 12ms 3 Year Factory Warranty	**$218**
Maxtor 540MB IDE 12ms 2 Year Factory Warranty	**$259**

MULTI• CONNECTION
MCT
USA TECHNOLOGY
Since 1984

QUALITY YOU CAN COUNT ON!

•5 Years Labor, 1 Year Parts Warranty
FCC Class "B" Approved Systems

At MCT
We Offer You

- ✓ Lifetime Technical Support
- ✓ 5 Years Labor, & 1 Years Parts Warranty On All Computers
- ✓ Excellent After Sales Support
- ✓ Custom Configuration
- ✓ 72-Hour Burn-in On All Systems
- ✓ Computer Specialists Since 1984

Pentium Systems

- •Intel Pentium CPU
- • VESA Local Bus with 256K Cache
- •8MB RAM
- •420MB Hard Drive
- •14.4/14.4 Fax/Modem
- •1.44 Floppy Drive
- •VLB IDE Controller w/2S,1P, & 1G
- •Tseng Lab ET4000 VLB SVGA Card w/1MB
- •Crystal Clear 14" .28dp Energy Star Monitor
- •Baby Case w/230W P.S.
- •101 Key Click Keyboard

90MHz VLB/PCI	$2088
66MHz	$1790
60MHz	$1688

486 Green VLB System

- •486DX CPU
- •3 Green VESA Local Bus
- •256K Cache
- •4MB RAM
- •260MB Hard Drive
- •1.44 Floppy Drive
- •VLB IDE Controller w/2S,1P, & 1G
- •VLB SVGA Windows Acc. Card w/1MB
- •Crystal Clear 14" .28dp Energy Star Monitor
- •Baby Case w/200W Green P.S.
- •101 Key Click Keyboard

DX2-66 *Best Buy*	$1045
DX-50	$1107
DX-40	$986
DX-33	$939

486 VLB Systems Multimedia

- •486CPU
- •3 VESA Local Bus, 256K Cache
- •4MB RAM
- •260MB Hard Drive
- •Mitsumi FX001D Double Speed CD-ROM
- •1.44 Floppy Drive
- •VLB IDE Controller w/2S,1P, & 1G
- •VLB SVGA Windows Acc.w/1MB
- •Crystal Clear 14" .28dp Energy Star Monitor
- •Baby Case w/230W P.S.
- •101 Key Click Keyboard

DX2-66 *Best Buy*	$1158
DX-50	$1228
DX-40	$1099
DX-33	$1063

FREE POWER STRIP

MONTHLY SPECIAL
MultiMedia System

- •486DX2-66 w/256K 3 VLB Slots
- •8MB RAM
- •420MB Hard Drive
- •1.44MB Floppy Drive
- •Diamond Speed Star Pro VLB SVGA Card w/1MB
- •Crystal Clear 15" Monitor 1280x1024 NI
- •VLB IDE I/O w/2S, 1P, 1G Ports
- •Double Speed CD ROM
- •Sound Blaster 16 Sound Card
- •Speakers
- •Mid Tower Case
- •101 Enhanced Click Keyboard
- •MicroSoft Serial Mouse

$1630

QuickNote MultiMedia Notebook

PC MAGAZINE EDITOR'S CHOICE

Rated in the top 4 Notebook by PC Magazine

- •Intel Enhanced SX, DX, DX2, DX4 CPU
- •4MB RAM exp. to 36MB
- •Built-in Audio, Microphone, Speaker, Sound Blaster & Windows Compatible
- •1MB Video RAM with Win Accelerator
- •PCMCIA III & II Slots
- •Removable 250MB Hard Drive (expandable)
- •Rechargeable NiCD Battery (two battery packs)
- •Ports for serial, parallel, docking station plus external monitor, keyboard, & mouse
- •Carry Case, AC Adapter
- •Weight 6.6lbs

Plus Much More! **CALL FOR OPTIONS**

Including Docking Station, PCMCIA Products, & Memory Cards

	Mono	Dual Scan
486SX33	1,547	2,027
486DX33	1,672	2,152
486DX266	1,720	2,200

Motherboard & CPU Upgrades

Speed up your machine.
At MCT we can upgrade your 286 or newer system with a new Motherboard & CPU

Pentium 90MHz 256K VLB/PCI	$1095
Pentium 66MHz 256K VLB	$803
Pentium 60 256K VLB	$730
486DX2-66 256K VLB	$325
486DX-50 256K VLB	$315
486DX-40 256K VLB	$271
486DX-33 256K VLB	$239
486SX-33 256K VLB	$187
386DX-40 128K	$90

MULTIMEDIA & SYSTEM UPGRADES

Sound Blaster SCSI II Power Kit

- •Toshiba 3401B SCSI CD-ROM
- •Audio Cable
- •Caddy
- •Stereo Speakers
- •Includes 6 CD titles
  - -US Atlas
  - -Tempra Photo CD
  - -Reference Library
  - -World Atlas
  - -Secret Weapons
  - -Loom

$538

Sound Blaster 16 Multi CD Kit

- • Mitsumi CD-ROM FX001D Double Speed (250ms 300KB)
- • Audio Cable
- • Stereo Speakers
- • Microphone
- • Includes 5 CD titles
  - -US Atlas
  - -Chessmaster 3000
  - -Return to the Zork
  - -World Atlas
  - -Mavis Beacon Teaches Typing

$358

CD-ROM DRIVES

Mitsumi FX001D w/Int	$130
Panasonic 562	136
Sony 33A	122
Toshiba 3401B SCSI	289

SOUND CARDS

Sound Blaster 16 Value	$108
Sound Blaster 16 Multi CD	145
Sound Blaster 16 Multi CD ASP	169
Sound Blaster 16 SCSI II	175
Sound Blaster 16 SCSI II ASP	200
Sound Blaster AWE 32	270

Government, Corporate, University, & VAR Inquiries and PO's Welcome

SYSTEM UPGRADES

VIDEO CARDS & MONITORS

ATI Ultra Pro VLB w/2MB	$249
ATI Plus VLB w/2MB	245
ATI Ultra Pro ISA w/2MB	249
ATI Ultra Pro EISA w/2MB	343
ATI Ultra Pro PCI w/2MB	355
DIAMOND Viper VLB w/2MB	338
DIAMOND Speed Star Pro VLB w/1MB	103
DIAMOND Stealth Pro VLB w/2MB	298
DIAMOND Stealth 32 w/2MB RAM VLB/PCI	200/208
DIAMOND Stealth 24 w/1MB (ISA/VLB)	139
ORCHID Celsius VLB w/1MB	190
ORCHID Fahrenheit VLB w/1MB	135
ORCHID KELVIN VLB w/1MB	145
TSENG Lab VGA w/1MB	68
Cirrus Logic w/1MB Windows Accelerator	55
Trident VLB w/1MB	66
NEC 3V	495
NEC 4FGE/5FGE	650/1025
SONY 1430/17SE1	1169/1528
Viewsonic 4E/6E	253/270
Viewsonic 15/15EX	428/395
Viewsonic 17/17G	920/816
Viewsonic 20/21	1490/1743

CONTROLLER

IDE 2FD/2HD with 2S/1P/1G	13
Promise DC-200M IDE w/512K Cache exp to 8 MB	90
Promise DC-4030 VLB/Cache Controller 0-16MB	119
Adaptec SCSI 1542 CFK w/Kit (ISA)	232
Adaptec SCSI VLB 2842	280
VLB IDE Controller 2FD/2HD with 2S/1P/1G	25

HARD DRIVES

212MB 13ms IDE	$163
250MB 14ms IDE	188
340MB 14ms IDE	198
420MB 13ms IDE	212
540MB 12ms IDE	299

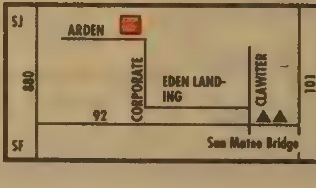
CASES

Tower Case full size, 6 drives, 250wps	$88
Tower Case medium size, 6 drives, 230wps	60
Tower Case mini size, 5 drive, 230wps	47

MISCELLANEOUS

Fax Modem (For DOS & WIN) (9600 Fax, 2400 Modem)	$39
Fax Modem (14,400 Fax, 14,400 Modem)(For DOS & WIN)	85
Serial Mouse (Color)	10
Power Center/Power Strip	14/3
Colorado Tape Backup 250MB	156
16-Bit Ethernet Card 10 Base-T	40
SIMM/CPU/SRAM/DRAM	LOWEST
Math-Co 387DX-33/40	40/45
Math-Co 387SX-25/33	40/40

3518 ARDEN ROAD
HAYWARD, CA 94545
(510) 670-0636 FAX (510) 670-0790
Hours M-F 9-6 SAT 10-4 Pacific Time
Prices subject to change without notice. Not responsible for typographical errors.



Killing Moon

continued from page 94

meant we were going to make a game that was a thousand times bigger than we did with Mean Streets.

What we wanted to do is give it the feel of a movie—good acting, realistic backgrounds, and a damn strong story. Plus, we wanted it to be funny, that the characters deliver their lines in a believable and natural manner, and to make sure there is tension. In other words, we wanted all of the things that you would normally consider to be part of the movie; that makes the movie experience something rich and a reason to go.

We also wanted to do what all of us wanted when we were kids—to be up on screen, to be part of this action, this activity. That does not mean you want to be an actor, but you want to be in that world. You want to be part of the magic that this environment offers, and that's where the computer comes in. We feel that through the computer we can create a world that you can almost step right into.

Sitting in front of a computer, what can the user do?

In our minds, we have created a world here, a three-dimensional world that exists. In other words, you pick up the mouse and you start moving around. This is a real world. You can go out on Texas Street and walk down this street that looks pretty real; you see a character and can start a conversation if you choose.

By typing in words?

No, you don't type in words. What you have are choices. Again this goes back to the elements of the movie. We don't want to make things cumbersome for the player. We don't want the interface to get in the way. But we want to make sure you are directly involved, so you can't just go up to someone and they immediately start spouting to you. Every time you come up to a conversation we give you three choices. But instead of just reading exactly what you are going to say, which takes away from the responsiveness of the situation, we give what we call attitude buttons.

We give the nuance of what this person's going to say. You choose whether you are going to be "hard about it," or perhaps what we call "pathetic groveling." It isn't going to be the same choices every time; there will be three distinct choices based upon the situation. The reason we do that is to keep the flow going. In just two words I know that I am going to deliver a back-handed compliment and the action keeps going.

The other advantage of this technique is you haven't heard it yet. If you read the conversation, in your mind you already have a psychological set of how that should be delivered. Then you hear it. It is getting too repetitive. We want to pull all those elements out. We want to say "here comes a back-handed compliment." And for you to think, "Yes, this will probably be funny."

If we deliver it in a funny way, we've done two things. First of all, you've made a choice so you're involved with it—it's an active choice that sounds exciting and would be interesting to do. Second of all, you hear it and it's funny. Then you get to hear the response to it. So bam, bam, bam you are delivering something that keeps the tension, the timing, and the pacing of the game going so that people feel like they are actively involved.

What is Under a Killing Moon about and where does it come from?

It's an extension of the Tex Murphy character we started in 1989 in a game called Mean Streets and in another game we did three years ago called Martian Memorandum. Tex was the main character in those two pieces of software and he is the main character in Under a Killing Moon as well.

He's a down-on-his-luck private investigator in the tradition of a Philip Marlowe or a Sam Spade. We've taken the genre and moved it ahead a hundred years, while still trying to keep the feeling and the mood and motif of the detective of the 1940s—the trench coat, the hat, the way he looks at the world with a cynical eye. But we do it on the light side.

The character that people are interacting with, manipulating, is Tex?

Right, you are Tex Murphy. You are playing a character from the start, you are playing this down-on-his-luck detective.

And what they see is Tex?

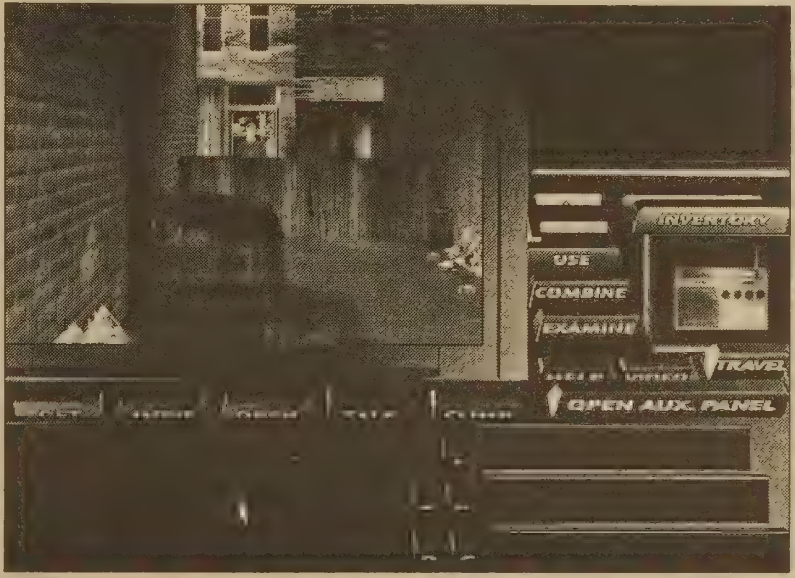
We have two points of view. One is through your eyes.

When you come into his office, for example, it is all first person. You are seeing the world through Tex's eyes, and it is a total virtual reality situation, a total simulation of his office. Let's say, you go over to his desk. You can open the drawer and look down into his desk. But, if you are not looking from the right angle you will not see inside the drawer. Again, this is not from a third-person view of somebody walking around the room. This is through the character's eyes.

Here you are totally active within the environment—you are making the choices, you are picking up things, you are looking around. You are not just waiting for something to happen. You have to make things happen in this world.

Now, let's say you go down onto the street and talk to a character. You will have choices as you go through a conversation. The choices go off in any number of directions, perhaps letting you talk to a character for quite awhile. Here, you see things from a third person's view. You might see both the characters together talking or you might see another character's perspective looking back at Tex, which is your character. We try to move the camera a lot when we're doing this. One response might elicit a camera angle from here, another response might be up from here, another might be a close-up.

The characters react in a particular way and you will make other choices. But all along you are gathering information. Someone might give you a name or other bits of information that are added to a list. By the end of the game you might have forty or fifty different objects on this list that you can then ask every character about, to see if they have any other information on these particular items. They might want objects and you have to find them.



One of the disadvantages is that people look at this and say, "This feels like a game to me, I have to go through and solve certain things." Yes, you do. But in order to keep the timing and the pacing of the movie that you are watching, there are full-blown hints in the whole game. You don't have to look anything up in a hint book or call a special number or pull yourself out of the environment that you are in, which all tend to give it that stop-and-go feel. You just hit the Hint button. The game knows exactly where you are, it knows exactly where you are stuck. There are lists. You just say, for example, "How do I get

シリコンバレーの
日本語で買える問屋

Mother Board (w/o CPU)

Micronics JX30 Green, 72pin simm w/256k	$295
Air SE w/256 for DX2-66, 30pin SIMM	$110
Air MIS w/256k, 72pin simm	$280
Air 486VP w/256K	$195
PCI 66 Acer w/256k	$490
PCI 90 Acer w/256k	$585
Taiwan 486DX66 3VL 4ISA ZIF Green 256k	$100
Taiwan 486DX4 100 3VL 4ISA ZIF Green 256k 72p	$120
China 486DX66 3VL 4ISA ZIF Green 256k	$ 88

Graphic Card

ATI Graphics Pro Turbo Mach 64 VESA/PCI/ISA 4M/2M	$495/$285
ATI GraphicsUltra Pro VESA w/2MB, VRAM	$235
Orchid Kelvin 64 VESA or PCI, DRAM 1MB/ 2MB	$138/$ 178
Diamond Speedstar Pro w/1MB, VESA or ISA	$99
Diamond Stealth 32 w/2MB, VESA or PCI	$208
Diamond Viper w/2MB, VESA or PCI	$315

Controller

ISA IDE/FDD/2s/1p/1g	$ 12
VESA IDE/FDD/2s/1p/1g	$ 18
Adaptec AHA2940K	$265
Adaptec AHA2940W	$380
Adaptec AHA1515	$79
Adaptec1522A	$130

Network

Addtron 10base-T/BNC Combo	$55
Klever Hub 16port, BNC, AUI,	$449
3 COM Etherlink 3 Combo	$149

Multimedia

Orchid Videola (Motion J-PEG)	$360
MicroVideo DC1 (Digital Video)	$860
Toshiba Double speed CD-ROM Drive	$248
SoundBlaster 16 Value Edition	$105

Accesery

Microsoft 400dpi serial Mouse	$25
Logitech MouseMan Serial	$25
Maxi Switch 101 Keyboard	$30
Mitsumi Keyboard	$15
Mouse Pad	$ 2
CPU Cooler&heat sink	$ 8
Pentium Cooler	$17
Joystick	$15

System

Ecomomy Class:$1,899 Intel 486DX66 cpu, Air EI w/256K, 8MB, 340MB HDD Diamond Stelth24, I/O, Teac 3.5&5.25 FDD, Mitsumi CD-ROM, Sound Blstr pro16,Logitec Mouse, Maxi Key, 14"Monitor, Minitower

Business Class: $3,230 Intel 486DX66 cpu,Air MIS w/ 256K, 8MB, 540MB SCSI HDD Diamond Stelth32 w/2MB, Teac 2in1 FDD, ToshibaCD, Sound Blaster Pro Audio 16 w/ASP, Logitec Mouse, Maxi Key, Nanao 17" Monitor, Fulltower Case.

First Class : $5,900 Intel Pentium 90, Acer PCI w/256K, 16MB, 1.8GB SCSI HDD, Diamond Viper w/2MB, Teac 2in1 FDD, NEC CD, Sound Blaster Pro Audio 16 w/ASP, Addtron Ethernet 10base-T & BNC, MS Mouse, Maxi Key, Nanao 21" Rfb. Monitor, Fulltower Case.

-BBT, Inc. -BigBang Technology, Inc.
100 Century Center Court, Suite 503, San Jose, CA 95112
日本語直通ダイヤル：408−453−8425
Local:408-453-0110, Fax:408-453-9115
VISA
Terms & Condition:Price & Company policy subject to change w/o notice. Price reflects cash discount. Not responsible typographical
Open:M-F, 10:00-18:30: For Japanese Customer till 15:00 of Japan Time

Killing Moon *continued*

the bum to talk to me? I've come to the alley and he just ignores me, I can't get anywhere with him." Just click on the Hint button and you are on your way.

Is it designed to be played in one sitting?

No. If you wanted to you could sit there for a couple of days.

One of the things that we've done is to give rewards for each period that is played. Basically, the story is divided into seven days. The first case that you saw might not even be tied to the end case, but you get a reward—a nice video at the end, then a hint or teaser for something coming up.

And all roads lead to the same ending?

Yes.

I've seen pieces that give you different endings depending upon the path you choose.

We thought a lot about that. The reason we don't is because we're storytelling. I've seen movies where you get to pick the ending. But there is really only one satisfying ending in any of these situations where you solve a mystery or get the girl or whenever there is a reward after you do all these things right. We felt it would be a waste of our resources and time going down avenues that aren't satisfying.

We decided to concentrate on the story itself. Whether you are playing a detective, a secret agent, any number of characters, you have a purpose, you have some goal. To deviate from that in this format is a waste of time.

Let's turn to your role in this. You are a partner in Access Software, you're the star and lead character, you cowrote and directed it. Where do you come from on this? Do you approach this with an acting background? A tech background? A business background? How did you get yourself in this mess?

All of these.

Some of the guys who work at the company are relatives of mine, people I've known all my life. And what we did when we were young was make movies. It's what we loved to do. Ever since I was thirteen-fourteen years old, we would spend our summers making movies. When you are the one who makes the movie, you get your satisfaction when you show them to family and friends. You see what works and what doesn't. You see what you thought might be successful and where you really screw up. But the whole fact of it is that you want to entertain people, you want them to have a good time when they see your movie.

There are two ways of looking at this. You could do this the Orson Welles way, which is where the critics love it, it's very deep, and it's something that most of the public never sees. Or you could do something that you consider to be an entertainment vehicle, more along the lines of a Spielberg idea, which takes these various elements to get this really rich look on the screen. But it is also very entertaining.

We wanted to entertain people. Every chance we got we were making films, making movies. When I went to school with these guys, I went to business school. But again, at the same time we were still doing all these things. Back in 1982, when Bruce Carver and I started Access Software, we kept thinking, "How can we make movies come out of this?" At that time, the technology was so far away from doing what we wanted that it fit in the realm of "yeah, we will produce games, and golf products, and all." But always, in the back of my mind was doing this.

How did you attract actors such as James Earl Jones, Brian Keith, Margot Kidder, and Russell Means?

The Notebooks of Choice!

PC WORLD
THE TOP 20
MOBILE PCs
Rated third best in August 1994
— *PC World*

PC MAGAZINE
"Excellent" Windows applications and 3rd best out of 70 notebooks on overall price/performance index
— *page 144 and 220, Aug. 94' PC Magazine*

ACER

EVEREX
EVER for EXcellence®

2 Year Warranty

AcerNote™ Key Features:

- Intel DX2-50/DX4-75MHz low-power processor
- 9.5" TFT or DSTN 256-color VGA LCD display
- Two PCMCIA Type II Slots or one Type III slot
- VESA local bus Windows accelerated video with 512Kb RAM
- Supports simultaneous VGA display on monitor and LCD
- 8MB RAM, upgradable to 12 or 16MB; 128KB flash BIOS
- 1.44MB floppy disk drive and removable hard disk drive
- 85-key keyboard, ergonomic palmrest and 20mm trackball
- EPA energy star compliant
- I/O ports: serial, parallel, SVGA, PS/2 and keyboard
- Ni-MH battery with 2.5 to 4.5 (3.5 for TFT) hour battery life*
- Dimensions: 11.4"x2.1"x8.6" (TFT); 11.4"x2.0"x8.6" (DSTN)
- Weight: 6.4 lbs (TFT); 6.2 lbs (DSTN)
- 90V to 265V auto-switching AC adapter (0.8 lbs only)
- MS-DOS and Windows package included and installed

Standard Warranty:

- One-year 24-hour replacement in the U.S. and Canada
- Free one-year Acer International Travelers Warranty: first class support in more than 20 countries worldwide
- Toll-free 24 hours a day/7 days a week technical support

780cx (TFT color, DX4-75, 8Mb, 340Mb HDD)	**$3,945**
760c (DSTN color, DX2-50, 4Mb, 340Mb HDD)	**$2,395**

Accessories:

Acer 4Mb/8Mb RAM module	$269/$699
Everex 4Mb/16Mb RAM module	$249/$995
PCMCIA 14,400 fax/modem and ethernet card	$195/$165
12V DC to 110V AC car adapter	$49

StepNote™ Key Features:

- Intel SX-33/DX2-50/DX4-75MHz low-power processor
- 9.5" TFT or DSTN 256-color VGA LCD display
- Two PCMCIA Type II Slots or one Type III slot
- VESA local bus Windows accelerated video with 1MB RAM
- Supports simultaneous VGA display on monitor and LCD
- 4MB RAM, upgradable to 8 or 20MB; 128KB flash BIOS
- 1.44MB floppy disk drive and removable hard disk drive
- 85-key keyboard, ergonomic palmrest and 20mm trackball
- EPA energy star compliant
- Integrated sound blaster compatible multimedia system
- Built-in high quality microphone and speaker
- I/O ports: microphone/speaker/Audio-in jacks, UART 16550 serial, bi-directional parallel, SVGA, PS/2 and keyboard and 160-pin docking station expansion
- Ni-MH battery with 2.5 to 4.5 (3.5 for TFT) hour battery life*
- Dimensions: 11.3"x1.7"x8.8" (TFT and DSTN)
- Weight: 6.1 lbs (TFT); 5.9 lbs (DSTN)
- 90V to 265V auto-switching AC adapter (0.8 lbs only)
- MS-DOS and Windows package included and installed
- Carrying case and multimedia speakers

Standard Warranty:

- One-year 48-hour hot swap turn around guarantee
- Second year returned to Everex for service (parts & labor)

TFT color, DX4-75, 4Mb, 520Mb HDD	**$3,845**
DSTN color, DX4-75, 4Mb, 520Mb HDD	**$2,995**
DSTN color, DX2-50, 4Mb, 340Mb HDD	**$2,395**
DSTN color, SX-33, 4Mb, 250Mb HDD	**$2,095**

INTELLIGENT NOTEBOOK SYSTEMS, INC.

3170 CORONADO DRIVE, SANTA CLARA, CALIFORNIA 95054
TEL: 408-748-9781 FAX: 408-748-9782
(AT SCOTT BETWEEN BOWERS/SAN THOMAS)
HOURS: M-F: 9-6; SAT.: 9-3

SAN FRANCISCO: MDS, 415-750-0863
EAST BAY: CYPRESS, 510-786-9106

MADE IN USA

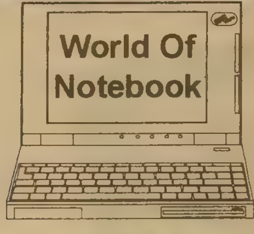
I N S I

* Actual battery life may vary depending on usage. VISA, Mastercard, company/personal checks are accepted upon approval. The Intel Inside logo is a registered trademark of Intel Corporation. Services and refunds are under merchants' discretion.

PC WAREHOUSE

90 Locations
Nationwide

You will come for the price
You will stay for the service



IBM

ThinkPad 360

SL Enhanced i486SX/33
Active , Dual Scan Color , Monochrome

ThinkPad360-170	$2059
ThinkPad360-340	$2499
ThinkPad360CS-170	$2599
ThinkPad360CS-340	$3099
ThinkPad360C-170/340	$3659/Call

ThinkPad 755

SL Enhanced i486DX2-50 or DX4/75
Active or Dual Scan

ThinkPad755CS/50-170	$3498
ThinkPad755CS/50-340	$3998
ThinkPad755C/50-170	$4998
ThinkPad755C/50-340	$5528
ThinkPad755CS/75-340	$4448
ThinkPad755CS/75-540	$4878
ThinkPad755C/75-340	$6128
ThinkPad755C/75-540	$6578

NEC

Versa 40EC-200	$3688
Versa 75EC-340	$4368

Versa S Series

SL-Enhanced i486SX/33 or DX2/50 CPU
Dual Scan or Active Color

Versa S/33D-210 (SL-Enhanced i486SX/33, Dual Scan Color)	$2398
Versa S/33C-210 (SL-Enhanced i486SX/33, Active Color)	$3248
Versa S/50C-260 (SL-Enhanced i486DX/50, Active Color)	$3678

Versa V Series

SL-Enhanced i486DX2/50 CPU
Dual Scan or Active Color

Versa V/50D-250(Dual Scan Color)	$Call
Versa V/50C-250(Active Color)	$Call
Versa V/50C-340(Active Color)	$Call
Versa V/50C-540(Active Color)	$Call

SHARP

8650II-200 (i486DX2/50 Active Color)	$Call
8650II-320 (i486DX2/50 Active color)	$Call
8650T-200 (i486DX/33 Active Color Track Ball)	$2699
8150T-200 (i486DX/33 Dual Scan Color Track Ball)	$2159
14400 Fax/Modem	$379

TOSHIBA

T1910-200SX33	$1598
T1910CS-200/SX33	$2069
T1950CT-200DX2-40	$2945
T1950CT-340DX2-40	$3199
T1960CS-200DX2/50	$2598
T1960CT-200DX2/50	$2999
T1960CT-340DX2/50	$3399
T2400CS-250DX2/50-8MB	$3198
T2400CT-250DX2/50-8MB	$3758
T2400CT-320DX2/50-8MB	$3938
T3600CT-250DX2-50-8MB	$4388
T4700CS-200DX2-50-8MB	$3388
T4700CS-320DX2-50-8MB	$3628
T4700CT-200DX2-50-8MB	$4759
T4800CT-500DX4-75-8MB	$Call
T6600C-510/510CD/510CDV	$Call

NOTEBOOK MEMORY

IBM

ThinkPad350/360-4MB	$179
ThinkPad350/360-8MB	$339
ThinkPad350/360-16MB	$699
ThinkPad500-4MB	$229
ThinkPad500-8MB	$399
ThinkPad750/755-4MB	$229
ThinkPad750/755-8MB	$399
ThinkPad750/755-16MB	$799
ThinkPad755-32MB	$Call

TOSHIBA

T2400/3400/3600 4/8/16MB 3.3v	$229/409/789
T4400/6400/6600 4/8/16MB	$219/379/709
T1900/1910/1950/1960/4500/4600/4700 4/8/16MB 3.3v	$229/429/799

SHARP

8150/8650/8650II-4MB	$219
8150/8650/8650II-16MB	$799

NEC

Versa E V 4MB 3.3v	$229
Veras E V 8MB 3.3v	$399
Versa E V 16MB 3.3v	$799
Veras S 4/8MB	$Call

NOTEBOOK ACCESSORIES

PCMCIA 14400 Fax/Modem	$199
Intel 14400 Fax/Modem	$219
Megahertz14400 Fax/Modem-XJ	$229
Megahertz Cellular	$399
Hayes PCMCIA 14400	$279
Xircom PCMCIA Ethernet 10BT	$249
Xircom PCMCIA Ethernet Combo	$309
Maxtor 130 MB PCMCIA III HDD	$Call
Ministor 128MB PCMCIA III HDD	$Call
CITIZEN Notebook Printer II	$289
New Media PCMCIA SCSI	$249
Color Kits for Printer II	$10

Intel 486DX-33	Intel 486DX2-66	Intel 486DX4-100	Pentium-60	Pentium-66	Pentium-90
Intel 486dx-33 CPU VLB Matherboard 256k 1-64 MB RAM VLB IDE controller 2S\1P\1G NEC1.44 Floppy drive Desktop Case w/230w 101 Enhenced Keyboard	Intel 486dx2-66 CPU VLB Matherboard 256k 1-64 MB RAM VLB IDE controller 2S\1P\1G NEC1.44 Floppy drive Desktop Case w/230w 101 Enhenced Keyboard	Intel 486dx4-100 CPU VLB Motherboard 256k 1-64 MB RAM VLB IDE controller 2S\1P\1G NEC1.44 Floppy drive Desktop Case w/230w 101 Enhenced Keyboard	Intel Pentium 60 CPU Motherboard **4PCI 3VLB** 1-128MB RAM IDE-PCI controller 2S\1P\1G NEC1.44 Floppy drive Mid-tower case w/230w 101 Enhenced Keyboard Heatsink/Fan	Intel Pentium 66 CPU Motherboard **4PCI 3VLB** 1-128MB RAM SCSI-II PCI controller 2S\1P\1G NEC1.44 Floppy drive Mid-tower case w/230w 101 Enhenced Keyboard Heatsink/Fan	Intel Pentium 90 CPU Motherboard **4PCI 3VLB** 1-128MB RAM SCSI-II PCI controller 2S\1P\1G NEC1.44 Floppy drive Mid-tower case w/230w 101 Enhenced Keyboard Heatsink/Fan
$455	**$495**	**$Call**	**$949**	**$1079**	**$1319**

1 Year Parts
2years Labor Warranty

High Quality, Full Compatibility And Reliablity Are Guaranteed!

PCI Mother Board
made in USA

MONITORS

NEC 3FGe re-furbished	**$449**
NEC 3FGe	$549
NEC 4FGe	$619
NEC 5FGe	$949
NEC 6FGp	$1969
SONY 15sf	$439
SONY 1730	$919
SONY 17SE1	$999
SVGA 14" NI .28dp	$235

PRINTERS & SCANNERS

HP DeskJet520	$275
HP DeskJet560C	$559
HP DeskJet1200C	$1399
HP DeskJet1200C/PS	$2099
HP LaserJet4L/4ML	$649/969
HP LaserJet4P/4MP	$945/1329
HP LaserJet4+/4M+	$1379/1899
HP LaserJet4si/4siMX	$2875/4199
Canon BJ200e(after rebate)	$259
Canon BJC600(after rebate)	$549
HP ScanJetIIP/CX	$479/935
CITIZEN GSX230	$189

DRIVES

Conner 210MB 12ms IDE	$165
Conner 420MB 12ms IDE	$215
Conner 540MB 12ms IDE	$285
Conner 1.08GB 9.5ms IDE	$579
Conner 1.06GB 9ms SCSI	$595
Maxtor 345MB 15ms IDE	$205
Maxotr 546MB 11ms IDE	$279
Maxtor 1.2GB 8.5ms SCSI	$859
Quantum 270MB 12ms IDE	$195
Quantum 340MB 12ms IDE	$225
Quantum 540MB 12ms IDE	$289
Quantum 1.0GB 10ms SCSI	$649
Syquest 270 Int/Ext	$499/569

MULTIMEDIA

NEC 510/3xi/3xe	$319/429/469
SONY 33A int w/CTL	$129
TOSHIBA 3401B int	$259
SoundBlaster16 Value	$79
SoundBlaster16SCSI-2	$139
SoundBlasterMCD/wASP	$169
Proaudio Studio 16	$115

VIDEO CARDS

ATI GraphicsUltraPro 2MB VLB/PCL	$220
ATI GraphicsUltraTurbo64 2MB VLB/PCL	$369
Diamond VIPER 2MB VLB/PCL	$259
9GXE64 2MB VLB-PCL	$249
Kelvin 64 1MB VLB-PCL	$135
Cirrus Logic 5428 1MB VLB	$75
Trident ISA 1MB	$65

CONTROLLERS

Adaptec 1542 SCSI w. kit	$225
Adaptec 2742 SCSI EISA w. kit	$315
Adaptec 2842 SCSI VLB w. kit	$249
Adaptec 2940 SCSI PCI w. kit	$198
Promise DC-200 IDE Cache	$90
Promise DC-4030 IDE VLBw/4HD	$115
IDE VLB .../1P/1G	$19
IDE ISA 2S/1P/1G	$15

TAPE BACKUP

Colorado DJ-20 250MB	$165
Colorado Trakker 250MB	$325
Conner Tape Stor 250MB	$149
IOMEGA 250MB	$179

MODEMS

Zoltrix 14400 Fax/Modem int	$69
Zoltrix 14400 Fax/Modem ext	$109
US Robotics 14400 Fax/Modem int	$109
US Robotics 14400 Fax/Modem ext	$135
Intel 14400 Fax/Modem int	$119
Monterey 14400Fax/Modem	$65

MEMORY

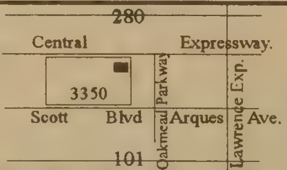
1MB X 9-70ns(3 chips)	$39
4MB X 9-70ns(3 chips)	$145
256k X -70ns(3chips)	$13
1MB X 36-70ns	$155
2MB X 36-70ns	$309
4MB X 36-70ns	$562
8MB X 36-70ns	$1139

MOUSE &KEYBOARDS

Logitech MouseMan	$29
Logitech Trackball	$69
Microsoft Mouse	$23
Agiler 3-button	$9
Focus FK2001 keyboard	$42
Monterey 101 Enhenced eyboard	$19

Santa Clara

3350 Scott Blvd.#46
408-986-8288



Business Hours
Mon-Fri
9AM-6PM
Financing Available

MasterCard
VISA
PURCHASING ORDER

Prices & Specs are subject to change w/o notice
Advertised prices are based on 2% cash discount
Not responsible for typographical errors

Palo Alto

454 A California Ave
(Btw El Camino & Alma)
415-321-9288

We looked at a lot of other pieces that were out there. The one thing that really stood out was how bad the acting was. It was a very stiff medium.

Working on computers has drawbacks. There is no way around that. Everything comes off the disk at a certain speed. When we were dealing with floppies you don't have very much storage. But even so, everyone wanted to put a little story in the front of these products. You would watch them, but it was just awful. The scripting was bad, the acting was bad, all of these things were almost laughable. People would spend a lot of working time on them, but you would want to click past most things and you would never want to watch them twice.

When we started this project we knew we had to get the acting caliber up if we are going to be considered a legitimate entertainment alternative. That's when we asked ourselves, "What are the chances of getting people who really are professionals? Who can bring something to the table that we just cannot duplicate by using models or people who maybe had a little theater experience." We talked with Catrine McGreggor [a casting director and location producer], who is a friend of my brother. "What are the chances of getting some people in here that can really do a job for us?" She knew Margot [Kidder] and told us, "I don't know, but I'll talk to her and see."

She [McGreggor] almost had to convince them that this wasn't going to be a joke. That we were taking this quite seriously, and that we wanted top-notch talent to be working on this. Most of these actors couldn't relate to this at all. The only thing they had ever seen like this was for Nintendo and Sega and they kept thinking, "What are they going to do to my image? Am I going to look like PacMan? Am I going to look like Mario Brothers?"

The answer is "No! We have better resolution than TV and your voice will sound just like your voice. You can put subtle nuances in your performances. We are going to give you a script that's funny and a character that's believable."

When you put all these elements together this is just an alternative medium for actors. Whether it's movies, or television, or interactive movies, this is also a legitimate form of entertainment. With the machines as powerful as they are we can really do something to allow the actor to give a performance on this screen. It is not just saying words. It is really acting. Once Margot saw what we were doing with the virtual reality stuff and how strong the images looked she became involved in this project.

Does this require a different business model when you are working with professional actors? How did you resolve issues of rights and pay?

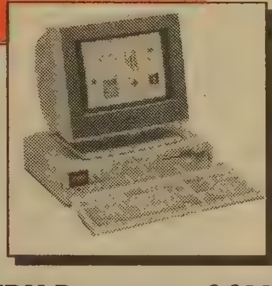
Most of these guys work with flat fees, but things are going to change. We were able to get them involved because they saw the potential from it. A lot of them think that if this is successful, it is going to open up opportunities that will be very lucrative for them. Eventually, if you are pulling in people like a Tom Cruise or Arnold Schwarzenegger there will be residuals and royalties and all the other things that go along with making a movie. But today a lot of the people realize that we are spending a ton of money trying to get this market established. I think that the Screen Actors Guild and the other organizations and agencies, like the William Morris Agency, realize that if they work with this and nurture the business along, that it is going to present great opportunities for them down the road. As more homes have CD-ROMs, and the better these products become, more people are going to be buying this as an alternative to movies and television. When all of this happens, they will be able to negotiate better deals and it will be a very lucrative deal for the actors.

Was making this more like a traditional movie or software?

From a business perspective you just have to say, "What's it going to cost me for these people?" You structure the royalty rates and then just figure your breakeven point. This is not much different for us than it has been in the past. Software's been involved with this process for quite some time, for instance with personalities from the sports industry, such as John

COMPU DATA

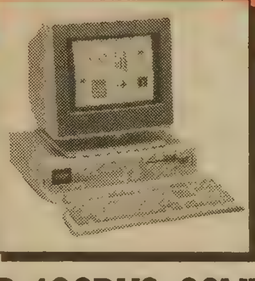
"A Name To Trust"



CPU Pentium 90MHz
- 512K Cache up to 2MB
- 16MB RAM
- 1.2 & 1.44MB Floppy Drives
- 1GB 10ms Hard Drive
- IDE VLB w/IO
- SVGA VLB Genoa w/2MB
- Trion 17" SVGA Monitor
- 101 Enhanced Keyboard
- MS-DOS, Windows & Mouse

[illegible]/66MHz $3599

$3688



CD 486DX2-66MHz
- 256K Cache
- 4MB RAM
- 340MB HD
- 1.2/1.44MB Floppy
- Super VGA Monitor/Card
- 101 Keyboard
- Windows, DOS, Mouse

$1499

NOTEBOOK SPECIALS

IDENTITY 486DX-33MHZ
- 8MB RAM
- 210MB HD
- Dual Scan Color Screen
- Trackball
- DOS/Windows

$2799

TOSHIBA T3400
- 4MB RAM
- 120MB HD

$1699

TOSHIBA T1910CS
- 4MB RAM
- 200MB HD

$2199

AVANTI 425C
- 486SLC/25MHz Color
- 4MB RAM
- 120MB HD
- Fax/Modem

$2129

BLOWOUT SPECIALS

- Trion 17" Flat Screen $499
- Compaq DeskPro 386/33, 4MB RAM, 84MB HD $599
- AST Premium 386/Monitor $799
- Archive 2 Gig SCSI Tape Back up $699
- Mr. Modom 14.4 Fax/Modem Internal/External $119/129
- Okidata ML 393C Plus $599
- Wacom 12x18 Tablets $399
- WordPerfect 5.1, 20 Users, SFT/mnl $899
- AITECH PC/TV Plus $199
- AITECH Wave Watcher $319
- AITECH Audio Show $399
- CD ROM Kit 16 Bit Multimedia Upgrade $329

Call For More Special Items On Sale

COMPU DATA

415/495-3422

SALES OFFICE
22 Third Street • San Francisco, CA 94103
Mon thru Fri 9:30-6:30 • Sat 11-5:00

Our Eighth Year On Business

Best Financing. 90 Days Same As Cash.
Approval Within Minutes.

VISA

Limited Stock for Special Prices

Prices subject to change without notice. • Not responsible for typographical errors.

IBM is a registered trademark of International Business Machines.
Compaq Pagemarq is a registered trademark of Compaq.

Madden Football or Michael Jordan Basketball.

The main difference is that a lot of big players are now involved—you've got Warner Bros., you've got Amblen. All these people who have traditionally been involved with movies now see the potential of multimedia. From that standpoint, I think, especially over the next twelve to eighteen months, the rules really are going to change as to how we negotiate with everyone and who is going to be available for this work. A lot of the major studios are going to tie up the people that they have traditionally dealt with. It is going to make things a little more difficult for independents. But I think there will always be high-quality actors available that we can use to make our products very successful.

Also, as the power of the machine grows the product itself will start to take on more and more of the way that a movie feels. Once there is a base of Pentiums out there, it is almost like the sky's the limit on what we can do.

For now, we have to reach back, we can't leave the 386es and the 486es. We still have to grab back in order to have enough of a base to make this project financially feasible. Eventually that older hardware starts to fade away and the more powerful machines start to become the norm. This is really just the beginning of what we are able to do. In two years, the difference that you will see is going to be tremendous.

I guess the market you are aiming for is labeled Home Entertainment, but there are still not that many CD-ROM drives in that market.

A year and a half to two years ago, when we started there wasn't a base that would work for us. But now there is a big enough base. It has been turning the corner over the last six months, since Christmas. If our piece is successful within the "CD multimedia market" then we are OK.

The computer is now coming online to do what everybody thought it could do ten years ago. In the next three or four years, computers are going to be an absolute necessity to have at home. And when people get it for what they consider to be the necessity, they are going to be picking up the entertainment along the way. Thus, the market is just going to expand for us. It is going to be even more viable for the actors who are involved with these projects. It is not going to replace those other two forms of entertainment, but it is going to take its place as the third medium in the home for this experience.

As this market expands, where do you see your competition coming from? The movie industry?

Yes, and they will eat up the smaller players. It used to be that a core group of six or seven could turn out a product in eight or nine months. That's gone. For us, it was twenty-five to thirty people involved with this for a year and a half. You can't do that if you are a small group.

As something new, how is this being marketed? As software? As video?

I think we are going to go straight after what we would term as entertainment. It is entertainment on CD, a software entertainment package.

I will be able to go into a computer store? I'll be able to go into a Blockbuster-type of place?

Right, and hopefully more video stores such as Blockbuster will get involved. Because of the size of the market that we have right now, it is probably viable only at some of the bigger chains. But eventually that is going to change as we increase the market for good-quality CD products.

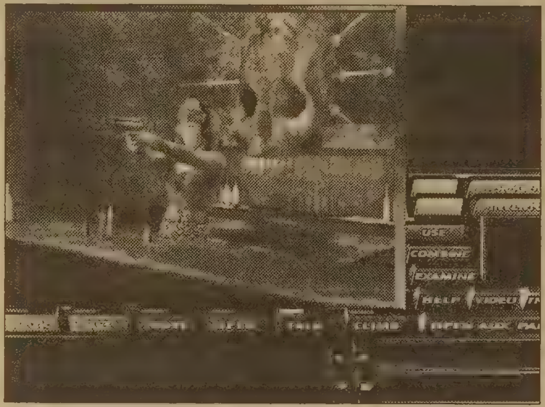
Under a Killing Moon will first be available for the PC, later for the Mac; what do you use in-house to make this project? With off-the-shelf software?

We are developing on PC.

For our art background, we start with 3D Studio. Then we combine that with scanned images and the software that we've developed to get everything into this three-dimensional environment.

Other programs might give you rendered paths. Seventh Guest is the best example that comes to mind. They let me click over there—I've got one path that takes me over to that spot. But ours is a total three-dimensional world. You go wherever you want to go and the images look as good as any product that is out there—in some cases better. I am not limited to where they tell me I have to go. And that's the biggest difference. That is the software that we've developed in order to allow that to happen. ■

Talking With Margot Kidder



Margot Kidder, best known as Lois Lane in the Superman movies, appears in Under a Killing Moon as Sass the bartender. Acting on her information, and with assistance from the mysterious Big P.I. In The Sky (James Earl Jones), Tex races to solve the mystery and save the world as we know it.

What attracted you to this project?

What attracted me was that I got paid a lot of money for a day's work on something called virtual reality that I had read about in *Scientific American.* I really knew nothing beyond that. I am computer illiterate and laughed my way sick through a day's work trying to figure out what on earth I was doing.

I've just seen for the first time a year later what I was doing, which is variables on any number of things interacting with a main player. I thought I was interacting with actors I had not met yet. In fact, I was interacting with you, the player. It's great fun, it is quite extraordinary.

What was the experience doing this, filming in isolation?

I just laughed. I tend to have a "when in trouble, laugh" outlook on things. I had no idea what I was doing, absolutely none. I just put my faith in Access Software and what they told me.

Do you see this as a medium to be growing?

I am sort of too old to answer that question, I am not being vain or modest. In a real sense I think that I really am. To me, it was a big move from my typewriter to a computer. For a new population of kids to whom this is merely another appendage it is no big deal.

I think it is another B movie business in the sense of the Arnold Schwarzenegger "let me kill you again, baby" or whatever those movies are. We have it again, but now we have it in your living room. You have four hours as opposed to one and a half and you get to play it.

I think it's on the same artistic level as the Arnold Schwarzenegger or Sylvester Stallone levels. And it will never really supersede that because you cannot create drama when you don't know the ending, you can't use the rules of drama, you can't do the characterizations when you have a player who can pick out any ending. What you've got is pure entertainment, in your living room. And it is kind of neat. ■

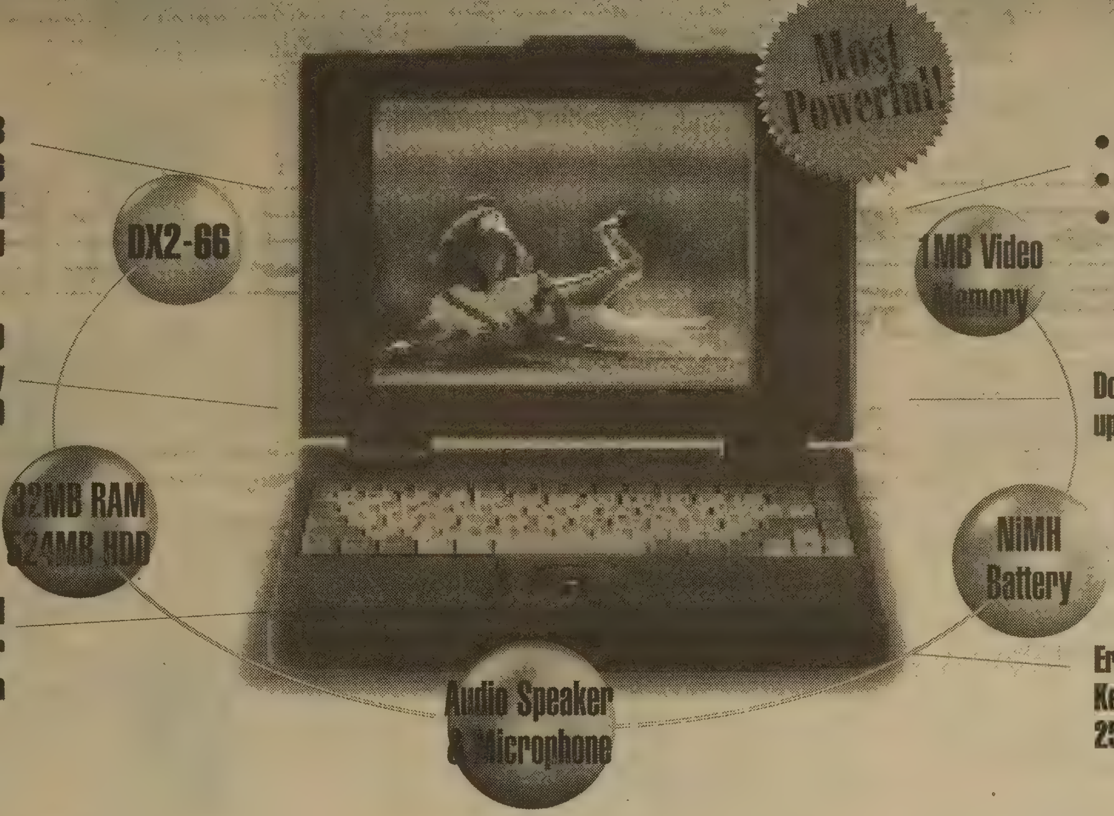
Smart Power at Your Fingertips

SmartBook II -The Ultimate Business Power Notebook

486SX-25/33
486DX-33/DX2-50/66
SL Enhanced
Upgradeable CPU

Upgradeable RAM and HDD
Up to 32MB Memory
Up to 524MB HDD

Built in Sound
Capabilities for
Multimedia



- 9.5" Upgradeable LCD Panel
- VESA Local Bus Video
- 1 MB of Video Memory

Double Your Battery Life
upto 8 Hours

Ergonomically Designed
Keyboard with Huge
25mm Trackball Mouse

Active Matrix / Dual Scan / Monochrome

PACKED WITH POWER!

- *Powerful - 486 SL Intel Enhanced CPU*
- *Long Lasting - Double NiMH Batteries up to 8 Hours*
- *Fast - VESA Local Bus Video and 1MB Video Memory*
- *Flexible - Up to 32MB RAM and 524MB HDD*
- *Convenient - 9.5" Upgradeable LCD Panel*

PC MAGAZINE

"Commax DX2/66 entries achieved the top processor score of 34.7. Commax Smartbook II with Rocket chip performed best, with some DOS video scores topping 4,000......and the best performers on our DOS video test."

August, 1994 Page 118

"Among all the 486DX/33 systems in this review, Commax entry had the best score overall."

August, 1994 Page 145

*HOT SUMMER SPECIAL**

(DUAL SCAN)	
486SX-33/4MB RAM/250MB HARD DRIVE	*$1,975*
486DX-33 OR 486DX-50/4 MB RAM/ 250MB HARD DRIVE	*$2,095*
486DX2-66/4 MB RAM/250MB HARD DRIVE	*$2,150*
486DX4-100/4 MB RAM/340 MB HARD DRIVE	*$2,695***
(ACTIVE MATRIX)	
486SX-33/4MB RAM/250MB HARD DRIVE	*$2,900*
486DX-33 OR 486DX-50/4 MB RAM/ 250MB HARD DRIVE	*$3,020*
486DX2-66/4 MB RAM/250MB HARD DRIVE	*$3,075*
486DX4-100/4 MB RAM/340 MB HARD DRIVE	*$3,695***

** Configured with one NiCD battry only, NiMH battery optional*
*** SmartBook III*

COMMAX
TECHNOLOGIES, INC.
1-800-526-6629
2031 Concourse Drive, San Jose, CA 95131
In Calif: (408)435-5000 • FAX: (408)435-5005

intel inside

SmartBook

The Intel Inside Logo is a registered trademark of Intel Corporation. Prices and configuration subject to change without notice.

IQ
INFOQUEST
COMPUTER

FOR YOUR SATISFACTION!

- We BEAT any price PLUS additional Discount.
- FREE Installation Available.
- $AVE 3% with CASH purchased on systems.
- Customized configurations are Welcomed.

"Visit Today to See Our Various DEMO SYSTEMS"

IQ INFOQUEST
4500 El Camino Real
Los Altos, CA 94022
Tel: (415) 917-9180
(415) 917-9181
(415) 917-9182
Fax: (415) 917-9183
Hours: Mon-Fri 9-7
Sat-Sun 11-5

Best Products, Quality Services, and Low Low Prices Guarantee.....

IQ Level-5 PCI System

PENTIUM

- Intel PENTIUM 90Mhz Processer
- **Intel PENTIUM Plato** Motherboard
- 256K Cache, 8MB RAM
- 1.44MB Floppy Drives
- 540MB IDE Hard Drive
- PCI IDE I/O Controller
- 2-Serial, 1-Parallel (High Speed UART)
- ATI Graphic Card PCI 2MB
- 15" 1280x1024 SVGA NI 0.28dpi
- DeskTop Case, 220 Watts PS
- 101 Keytronic Keyboard
- Microsoft Serial Mouse
- P90 CPU Cooling Fan

$2339

IQ Level-4 VLB System

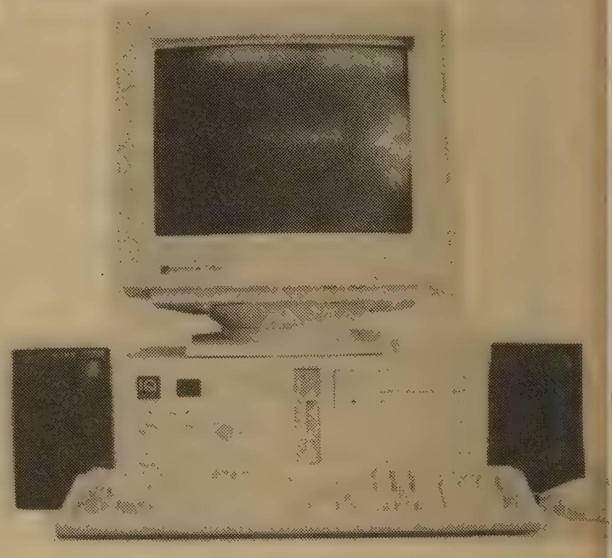
BEST BUY

- 486 DX-33Mhz VLB/Green System
- Pentium Ready & DX4 Upgradable
- 256K Cache, 4MB RAM
- 1.44 Floppy Drive
- 260MB IDE Hard Drive
- VLB IDE I/O Controller
- 2-Serial, 1-Parallel, 1-Game
- VLB Graphic Accelerator 1MB
- 14" 1024x768 SVGA NI 0.28dpi
- Mini Tower Case, 220 Watts PS
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse

$939

486DX2-50.........$985
486DX2-66......$1049

LOOK!



Call IQ Today!

IQ Level-4 MCD System

MULTIMEDIA

- 486DX-33Mhz VLB/Green System
- Pentium Ready & DX4 Upgradable
- 256K Cache, 4MB RAM
- 1.44MB Floppy Drive
- 260MB IDE Hard Drive
- VLB IDE I/O Controller
- 2-Serial, 1-Parallel, 1-Game
- VLB Graphic Accelerator 1MB
- 14" 1024x768 SVGA NI 0.28dpi
- Mini Tower Case, 220 Watts PS
- 101 Enhanced Keyboard
- Microsoft Compatible Mouse
- Double Speed CD-ROM
- 16bit Sound Card & Speakers
- FREE 2 CD Titles

$1165

486DX2-50....$1199
486DX2-66....$1279

IQ Level-4 PCI System

486 PCI

- 486DX2-50 PCI/VLB/DX4 System
- P24T & DX4 Ready
- 256K Cache, 4MB RAM
- 1.44MB Floppy Drives
- 420MB IDE Hard Drive
- VLB IDE I/O Controller
- 2-Serial, 1-Parallel, 1-Game
- ATI Graphic Card PCI 1MB
- 14" 1024x768 SVGA NI 0.28dpi
- Mini Tower Case, 220 Watts PS
- Keytronic Keyboard
- Microsoft Compatible Mouse

$1109

486DX2-66....$1185

IQ Level-5 PCI System

PENTIUM

- Intel PENTIUM 60Mhz Processer
- Intel PENTIUM Motherboard
- 256K Cache, 8MB RAM
- 1.44MB Floppy Drives
- 420MB IDE Hard Drive
- PCI IDE I/O Controller (High Speed UART)
- 2-Serial, 1-Parallel
- ATI Graphic Card PCI 1MB
- 14" 1024x768 SVGA NI 0.28dpi
- Mini Tower Case, 220 Watts PS
- Keytronic Keyboard
- Microsoft Serial Mouse
- CPU Cooling Fan

$1735

Pentium 66.... $1869

6500 SERIES NOTEBOOK

- 486 VLB System
- 4MB RAM (Exp: to 36MB)
- 258MB HDD
- 3.5" FDD
- 9.5" Screen Size
- Up to Type IV PCMCIA card slots
- 1S, 1P, PS/2, Ext. SVGA Ports

Chem6500	MONO	DUAL SCAN	ACTIVE
486DX-33	$1577	$2095	$3154
486DX2-50	$1609	$2128	$3186
486DX2-66	$1717	$2236	$3294

PENTIUM3600 MULTIMEDIA - 8MB RAM

Chem3600	258MB HD	340MB HD
PENTIUM60, Dual	$3348	$3456
PENTIUM66, Dual	$3434	$3542
PENTIUM60, Active	$4428	$4536
PENTIUM66, Active	$4622	$4730

IQ

INFOQUEST
COMPUTER

Best Products, Quality Services, and Low Low Prices Guarantee.....

1. SOUND CARDS

Sound Blaster 16
Multi-CD
$105

Sound Blaster Pro 16 Basic	$95
Sound Blaster 16 SCSI-II	$150
Sound Blaster 16 Multi-CD	$105
Sound Blaster 16 Multi-CD W/ASP	$155
Sound Blaster AWE32 (4Mb Ram)	$280
Sound Blaster Discovery CD16 Kit	$285
Pro Audio Jazz 16 (SCSI)	$80
Pro Audio Spectrum 16 (SCSI)	$94
Pro Audio Studio 16 (SCSI)	$115
Pro Movie Spectrum	$69

2. CD-ROM DRIVES

Multimedia Pack
Mitsumi + Pro Jazz 16
$189

PANASONIC 562 320ms, 300KB/sec Data Transfer Photo CD Compatible, Double Speed	$135
SONY 33 300KB/sec Data Transfer Photo CD Compatible, Double Speed	$135
MITSUMI 250ms, 300KB/sec Data Transfer Photo CD Compatible, Double Speed	$135
NEC 510 Triple Speed SCSI CD-ROM, 256K Cache 190ms, 450KB/sec Data Transfer Photo CD Compatible, Caddy	$335
TOSHIBA XM-3401B Double Speed SCSI CD-ROM, 256K Cache 200ms, 330KB/sec Data Transfer Photo CD Compatible, Caddy	$250
CHINON CD 535 Double Speed SCSI CD-ROM, 256K Cache + 64K Buffer Photo CD Compatible, Caddy	$280

3. HARD DRIVES

SEAGATE
420Mb IDE
$196

CONNER		
IDE	420Mb, 12ms, CFS420A	**$210**
	540Mb, 12ms, CFA540A	$285
	1.0Gb, 10ms, CFP1080A	**$545**
SCSI	540Mb, 12ms, CFA540S	Call
	1.0Gb, 10ms, CFP1060S	**$635**
WESTERN DIGITAL		
IDE	420Mb, 13ms, WD2420	$220
	540Mb, 12ms, WD2540	$325
	1.08Gb, 10ms, WD3100	**$545**
QUANTUM		
IDE	540Mb, 12ms, 128K, LPS540AT	$295
SCSI	340Mb, 12ms, 128K, LPS340S	Call
	540Mb, 12ms, 128K, LPS540S	$330
	1.0Gb, 10ms, 512K, PD1080S	$650
MAXTOR		
IDE	345Mb, 14ms, 7345A	Call
	546Mb, 12ms, 256K, 7546A	$295
SCSI	345Mb 14ms, 7345S	Call
	540Mb, 8.5ms, 256K, MXT540S	$425
SEAGATE		
IDE	260Mb, 16ms	$159
	340Mb, 16ms	$185
	420Mb, 14ms	$196
SCSI	1.0Gb	$629
	2.1Gb	$1269
OTHERS		
	IBM IDE 280Mb	**$190**
	IBM IDE 340Mb	$225

4. CONTROLLERS

Adaptec 1522
ISA-SCSI CONTROLER
$89

EISA/SCSI	
Adaptec 2742T EISA SCSI-II	$345
BusLogic 742A EISA SCSI-II	$229
QLogic FastSCSI EISA 256K	$209
VLB/SCSI	
Adaptec 2842 VLB SCSI-II	$245
BusLogic 455s Vlb SCSI-II	$229
QLogic FastSCSI VLB 256K	$189
PCI/SCSI	
Adaptec 2940 PCI/SCSI-II	**$249**
Adaptec 2940W PCI/SCSI-II	**$299**
BusLogic 946C PCI/FastSCSI-II	$245
QLogic FastSCSI PCI 64K	$299
ISA/SCSI	
Adaptec 1522 SCSI	$89
Adaptec 1542CF SCSI	$159
Adaptec 1542CFw/Kit	$225
BusLogic 545 FastSCSI(BusMaster)	$209
VLB/IDE	
DTC 2278 VLB IDE I/O Ctrl	$25
32bit VLB IDE I/O Ctrl	$20
ISA/IDE	
Hi Speed 16550 IDE I/O Ctrl	$39
IDE I/O Ctrl w/ Cables	$15

5. MONITORS

17" Monitor
MAG DX17F
$655

MAG	
DX15F (15" 1280x1024 NI/G 0.28)	**$369**
DX17F (17" 1280x1024 NI/G 0.26)	**$655**
MX21F (21" 1600x1280 NI/G 0.28)	$1749
NEC	
3FGe (15" 1024x768@60Mhz)	$559
4FGe (15" 1024x768@76Mhz)	$615
5FGe (17" 1024x768@76Mhz)	$955
SONY	
15SF (15" 1280x1024 0.25)	**$445**
17SE (17" 1280x1024 0.25)	**$925**
20SE (20" 1600x1280 0.30)	$1879
VIEWSONIC	
15EX (15" 1024x768 0.28)	**$370**
15 (15" 1280x1024 NI 0.28)	$449
17G (17" 1280x1024 NI 0.28)	$760
17 (17" 1600x1280 NI 0.28)	$925
20 (20" 1600x1280 NI 0.28)	$1489
21 (21" 1600x1280 NI 026)	$1749
IMPRESSION	
IMP 7 (17" 1280x1024 0.26) NI	$625
IMP 5 (15" 1280x1024 0.28) NI	$315
IMP 3+ (14" 1024x768 0.28) NI	$235

6. VIDEO CARDS

ATI ULTRA mach32
PCI or VLB or ISA 1MB
$125

PCI	
ATI GraphicPro Turbo 4Mb VRAM	**$535**
ATI GraphicPro Turbo 2Mb VRAM	**$335**
ATI GraphicPro Turbo 2Mb DRAM	**$250**
ATI UltraPro 32bit 2Mb VRAM	$245
ATI UltraPro 32bit 2Mb DRAM	$175
ATI UltraPro 32bit 1Mb DRAM	$129
Diamond Viper 2Mb VRAM	$299
Diamond Stealth 64 4Mb VRAM	$445
Diamond Stealth 64 2Mb VRAM	$315
Diamond Stealth 32 2Mb DRAM	$219
Diamond Stealth 32 1Mb DRAM	$165
GENOA Phantom 32I PCI 2Mb	$169
Number 9 GXE Pro 64 2Mb VRAM	**$345**
Number 9 GXE 64 PCI 2Mb DRAM	**$239**
Number 9 GXE 64 PCI 1Mb DRAM	**$169**
Orchid Kelvin 64bit PCI 2Mb	$175
Orchid Kelvin 64bit PCI 1Mb	$135
ISA	
ATI UltraPro 32bit 2Mb DRAM	$175
ATI UltraPro 32bit 1Mb DRAM	$125
16bit SVGA 1Mb	$59
16bit SVGA 256K	$29
VLB	
ATI GraphicPro Turbo 4Mb VRAM	**$535**
ATI GraphicPro Turbo 2Mb VRAM	$335
ATI GraphicPro Turbo 2Mb DRAM	**$250**
ATI UltraPro 32bit 2MB VRAM	$245
ATI UltraPro 32bit 2Mb DRAM	$175
ATI UltraPro 32bit 1Mb DRAM	$125
Diamond Viper VLB 2Mb VRAM	$299
Diamond Stealth 64 2Mb VRAM	$315
Diamond Stealth 64 2Mb DRAM	$185
Diamond Stealth 64 1Mb DRAM	$139
Diamond Stealth 32 2Mb DRAM	$219
Diamond Stealth 32 1Mb DRAM	$169
Diamond Stealth 24 VLB 1Mb	$125
Genoa Phamtom 32 VLB 2Mb	$169
Genoa 8500 VLB 1Mb	$89
Number 9 GXE 64 VLB 2Mb	$239
Number 9 GXE 64 VLB 1Mb	$169
Orchid Kelvin 64 2Mb DRAM	$180
Orchid Kelvin 64 1Mb DRAM	$139
Spider B/Widow 2Mb	$209
32bit Cirrus Logic SVGA VLB 1Mb	$79
32bit SVGA VLB 1Mb	$69

7. MOTHER BOARDS

486 PCI/VLB/DX4
INTEL ARIES CHIPSET
$199

PENTIUM 60/66/90/100	
Intel P60/P66 PCI/ISA w/256K & IDE	$325
Intel P60/P66 PCI/ISA w/256K&SCSI	$375
Intel Plato P90 PCI/ISA w/256K & IDE	**$385**
SuperMicro P90/P100 PCI/VLB 512K	**$399**
SuperMicro P90/P100 PCI/VLB 256K	$375
ASUS	
486 VLB/ZIF w/256K	$135
486 EISA/VLB w/256K	$285
486 PCI/ZIF IDE w/256K (DX4 Ready)	$205
486 PCI/ZIF SCSI+IDE+I/O w/256K	$280
IBM/ALARIS/ETEQ	
486SLC2-66 VLB w/64K CPU	$259
486SLC3-75 VLB w/128K CPU	$389
OTHER	
486DX Genoa TurboExpressVLB 256K	**$125**
486DX VLB (P24T Ready)w/256K	$105
486DX VLB/G (DX4 Enable)w/256K	**$115**
386/486DX VLB w/256K	$105
386DX-40 ISA w/128K & CPU	$99
386SX-40 ISA w/CPU	$89
CPU	
AMD 486DX-40Mhz	Call
AMD 486DX2-50Mhz	Call
AMD 486DX2-66Mhz	Call
Cyrix 486DX-33Mhz	Call
Cyrix 486DX-40Mhz	Call
Cyrix 486DX2-50Mhz w/HeatSink	Call
Cyrix 486DX-50Mhz w/HeatSink	Call
Intel 486DX-33Mhz	Call
Intel 486DX2-50Mhz	Call
Intel 486DX2-66Mhz	Call
Intel 486DX4-75Mhz	Call
Intel 486DX4-100Mhz	Call
Intel Pentium 60Mhz	Call
Intel Pentium 66Mhz	Call
Intel Pentium 90Mhz	Call
CPU Cooling Fan & Accessories	
486 Cooling Fan	$8
DX4 CPU Voltage Regulator	$15
Pentium 60/66/90/100 Cooloing Fan	$12

8. KEYBOARDS

101 Enhanced Keyboard	$18
KeyTronic 101	$28
KeyTronic 101 (Reg)	$22
Focus 2001 Keyboard	$35
Focus 9000 Keyboard	$55

9. CASE w/ POWER SUPPLY

Desktop, 220 watts Power Supply	$65
Mini Tower, 220 watts (Reg)	$49
Mini Tower, 220 watts (Fancy)	$59
Mid Tower, 230 Watts	$79
Full Tower, 250 Watts	$95
Full Tower, 250 Watts (Fancy)	$105

10. MOUSE

Microsoft Serial Mouse	$28
Microsoft Bus Mouse	$54
Logitech MouseMan (Bus)	$55
Logitech First Mouse (Serial)	$25
Logitech First Mouse (Bus)	$45
Z-Nix Mouse (2-buttons)	$15
3-buttons serial mouse	$9

11. MODEMS

CRUSING ON INTERNET
SEE INSTORE DEMO
EASYNET

Online 9600/2400 FaxModem (int)	$39
Online 14.4 FaxModem (int)	$85
Online 28.8 FaxModem (int)	$159
USRobitics 14.4 (Int)	$110
USRobitics 14.4 (Ext)	$135

12. FLOPPY DRIVE

1.2 MB Floppy Drive	$43
1.44MB Floppy Drive	$36
1.44Mb & 1.2Mb Combo Floppy Drive	$99

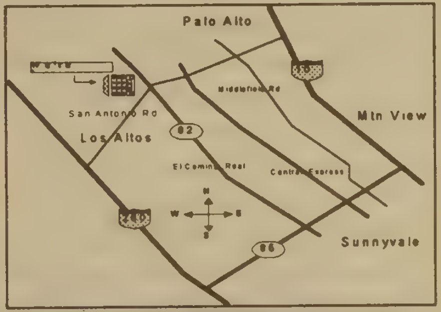
13. MEMORY & CHIPS

1Mb 1x3 70ns	$38
4Mb 4x3 70ns	$149
4Mb 1x36 70ns 72pin	$155
8Mb 2x36 70ns 72pin	$310
16Mb 4x36 70ns 72pin	$615

14. TAPE BACKUP

Colorado Memory System	
Jumbo 250Mb DJ20 (int)	$155
Trakker 250Mb (Ext)	$318
Conner Tape Stor 250Mb (int)	$145

VISIT OUR STORE TODAY



ALL COMPONENTS PRICE REFLECT CASH DISCOUNT!
NOT RESPONSIBLE FOR TYPOS!
PRICES SUBJECT TO CHANGE W/O NOTICE.

That's Entertainment

Personal Computers Getting Into Showbiz

By Douglas J. Nakakihara

During the same week in June in the LA area, three major trade shows, Digital World, InfoComm, and ShowBiz Expo, gave a compelling demonstration of the ways personal computers are creating or delivering some form of entertainment.

If you look back at, say, the Commodore 64, you'd see that desktop computing began with a high concentration of entertainment software. As PCs and Macs slowly took hold, number crunching, word processing, and other productivity applications dominated the market. Today we've come full circle—soundboards, GUIs, color monitors, CD-ROMs, etc. are becoming standard PC peripherals. Entertainment-related applications are no longer taking a back seat.

Computers are dramatically affecting time-tested crafts and techniques used to create various forms of entertainment, and also opening new avenues in which creative people can apply their talent. Major recording artists are developing interactive CD-ROM titles. Desktop PCs are being used for special effects in the production of broadcast television shows and major motion pictures. PCs are also being used to produce music videos, where all of the editing is done in a totally digital environment.

Computers are also being used to create effects that would have been impossible with earlier technology. The Simi Valley-based Dreamquest, an exhibitor at ShowBiz Expo, worked on *The Crow*, doing such things as pasting Brandon Lee's head on another actor's body!

Computer art, though still in its infancy, is finding acceptance as an art unto itself rather than an imitation of traditional art forms. Just as my daughter will probably never

1MB
SIMM's
Memory
$37

14.400/14.400
ETEC Internal
Fax/Modem
$85

Media Magic
16-Bit
Stereo Sound
Card
$75

Mitsumi
Double Speed
External
CD-ROM
$199

JIS MICRO

The Low Price Leader In Quality Computer Products!

5 Year Labor Warranty on All Systems

	MB+CPU	Basic	Basic 4+ 420MB	Basic 4+ 420MB HD 14" SVGA W/CARD
PENTIUM 66 PCI256K	$1020	$1235	$1395	$1852
PENTIUM 66 VLB 256K	916	1072	1232	1741
BLUE LIGHTNING 75MHz	295	451	611	420
486DX2-66 PCI 256K	495	651	811	1320
486DX2-66 VLB 256K	365	521	681	1190
486SLC-66 VLB 64K	235	390	550	1060
486DX-40 VLB 256K	255	411	571	1080
486SLC-50 ISA	150	306	466	975
486DLC-40 ISA 128K	130	286	446	955
486DX-33 VLB 256K	315	471	631	1140
486SLC-40 ISA	120	276	436	945

BASIC SYSTEM INCLUDES:
Motherboard & CPU, 1MB Memory, Floppy Drive, 1:1 2HD/2FDD Controller w/2 Serial, 1 Parallel, 1 Game Ports, 101 Keyboard and Mini Tower Case with Power Supply

MONTHLY SPECIALS

Double Speed CD-ROM	$145
486SLC-50 Motherboard w/CPU	140
486DX-33/50/66 VLB 256K Motherboard 0/CPU	85
14.400/14.400 Internal Fax & Modem	85
15" Super VGA Monitor .28dp	310
486-50 System Special Sale	CALL

PENTIUM 66 MHz 512K

- Motherboard with 512K Cache
- Intel Pentium 66 MHz CPU
- Mini-Tower Case or Desktop Case
- 101 Enhanced Keyboard
- 1.2 or 1.44 Floppy Drive

$1330

486-66 MULTIMEDIA BUNDLE

Package Includes:

- 4MB RAM 70ns
- Sony CD-ROM Double Speed
- 270MB Hard Drive
- 16-Bit Sound Card
- 1.2 or 1.44 MB Floppy Drive
- Mini-Tower Case /230W power
- 14" SVGA 1024x768 .28 Color Monitor Non-Interlaced
- IBM-Alaris 486 SLC-66 MHz-64K
- SVGA Card w/1MB
- IDE Controller (2S/1P/1G)
- 101 Keyboard
- Microphone/Software Bundle
- Pair of Speakers
- 2 CD Titles

$1320

MULTIMEDIA

486SX-33 MHz/Intel CPU	$1182
486DX-33 MHz/128K/Intel CPU	1330
486DX2-50 MHz/256K/Intel CPU	1400
486DX-50 MHz/256K/Intel CPU	1530
486DX2-66 MHz/256K/Intel CPU	1560
Pentium 60 & 8 MB/512K/Intel CPU	2350

UPGRADES:

340MB Hard Drive	ADD $40
540MB Hard Drive	ADD $205
15" Non-Interlaced Monitor	ADD $190
17" Non-Interlaced Monitor	ADD $450

CASE WITH POWER SUPPLY

Mini Tower Case w/230W Power Supply	$38
Desktop AT Case w/230W PS	42
Medium Tower Case w/200W PS	68
230W PS	38
Full Tower Case /250W/2 Fans	90

CD-ROM/MULTIMEDIA

Brand Name Double Speed CD-ROM	$145
SONY Double Speed CD-ROM	150
MITSUMI Double Speed CD-ROM	150
PANASONIC Double Speed CD-ROM	150
Media Magic 16-Bit Sound Card	89

CONTROLLERS

IDE 2FD/2HD/2S, 1P, 1G	$12
IDE 2FD/2HD/2S, 1P, 1G LOCAL BUS	25
IDE 4FDD/2HDD 2.88	59
IDE CACHE Controller/VLB	145
DTC 3280 SCSI Kit	98
1542CF (SCSI)	176
1542CFK w/Kit (SCSI)	245
2842VLK EISA (SCSI)	278
Asus EISA (SCSI)	340
Bus Logic 4455 VLB (SCSI)	260
DTC 2290 DISA IDE	118
DTC 2280 ISA IDE	14
DTC 2270 VLB IDE	58
DTC 3290 EISA SCSI	418
Promise DC-200 IDE Cache Controller	90
Promise CD-410 VLB w/512K Cache	114
Promise DC-4030 VLB IDE Cache Controller	124

FLOPPY DRIVES

1.2MB/1.44MB Teac	$44/41
1.2MB/1.44 MB Mitsumi	43/38
1.2MB/1.44 Teac Black	50/44
1.2/1.44MB Epson	42/40
1.2/1.44 Teac Dual	110
2.88 MD FDD	98

HARD DRIVES

210MB IDE	$175
250MB IDE	220
345MB IDE	195
420MB IDE	235
540MB IDE	320
520MB IDE/SCSI	510
1.0GB SCSI-2 CONNER	785
1.37 GB SCSI-2 3/1" SIZE	1115
2.0 GB SCSI-2 Fujitsu	1450

KEYBOARDS

Mitsumi 101 Keyboard	$15
Keytronic 101 Keyboard	28
Fujitsu 4700 101 Keyboard	40
Maxi-Switch 101 Keyboard	23
Left 101 Keyboard/Click	40

MODEMS

2400 MODEM (9600 Send Fax Modem)	$24
Fax Modem (9600/2400) R/S	43
14.400/14.400 Fax Modem Ext v.32S/R	119
14.400/14.400 Fax Modem Int v.42	89

MONITORS

15" SVGA .28 NI 1280X1024	$310
14" VGA Mono/Mono	105/88
14" SVGA .28 (1024x768)	215
14" SVGA .39 (1024x768)	185
ViewSonic 4E/V6E .28	275/280
ViewSonic 15E NI .28	380
ViewSonic 17G NI .28	790
ViewSonic 17 NI .28	870
ViewSonic 20 NI .28	1500
ViewSonic 21 NI .28	1650
NEC 5FGE/4FGE	1059/735
17" CTX NI 1280x1024	699

MOTHERBOARDS

Pentium 586-66 MHz 512K	$330
486DX-66/50/33/256K EISA & VESA	199
486DX-66/50/33/256K 2 VLB	95
3 486DX-66/50/33/256K 2 VLB	115
486DX-66/50/33/128K 3 VLB	85
386SX-33 CPU	64
386DX-40/128K	93
486/66/256K PCI	220

MOUSE/MISC.

3-Button Mouse	$8
Microsoft Mouse/Logitech MouseMan OEM	34
Trackball Mouse	30
250MB Tape Back-Up/Tape	150
120MB Tape Back-Up DJ-10/EXJB-10	125/289
1MB 70ns SIMMS	37
4MB 70ns SIMMS	145
256x9 70/80 ns SIMMS	12
486 & 386 CPU's	CALL
387-40 Math Co-Processor	39

NETWORK PRODUCTS

16 Bit Ethernet Card 3 Com	$49
16 Bit Ethernet Card 10Base T/Coax	40
16 Bit Ethernet Card BNC/AUI/RJ45	45
8 Bit or 16 Bit Auto Boot Prom	12

PRINTERS

HP 4 SI	$2965
HP 4M PLUS	1872
HP 4 PLUS	1385
HP DESKJET 1200C	1499
HP 4/4M/4L	1399/1895/665
HP SCANNER 2C	1285
HP DESKJET 550C	495
KX-P 4410	585
Laser 1000	625
LQ-570 Plus	255
LX 810	199
HP 520	285

VIDEO CARDS

ATI	
Graphics Ultra 2MB VESA	$280
Graphics Ultra 1MB (VLB) ISA	155
Graphics Ultra Pro 2MB EISA	299
Graphics Ultra Plus 2MB	235
Cirrus Logic	
CL-GD5420 w/1MB	56
CL-GD5426/5428 VLB w/1MB	87
Diamond	
SpeedStar Pro (ISA/VLB) 1MB	105
Stealth Pro VLB 1MB/2MB	238/299
Viper 2MB 512K VLB	355
Viper 2MB 512K PCI	425
8500 VLB w/1MB	95
Genoa	
8500VLB w/1MB	95
Phantom 32 PCI 2MB	245
Orchid	
Fahrenheit VLB w/1MB	146
Celsius VLB 1MB/2MB	194/270
Spider	
VLB 1MB/2MB	93/135
Black Widow 1MB/2MB VRAM	170/212
Trident	
9000A w/256K	29
9000 w/512K	38
w/1MB VLB 32i	79
SVGA w/1MB ISA	58

JIS MICRO

Technology

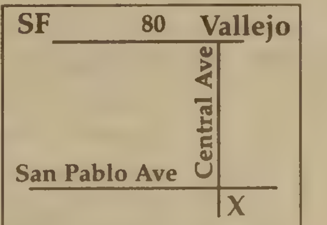
10106 San Pablo Ave. El Cerrito, CA 94530
(510) 524-0312
(408) 735-7425
FAX (510) 524-1534

We Do Upgrades & Repairs!

5 Year Labor Warranty on All Systems
1 Year Warranty on All Parts

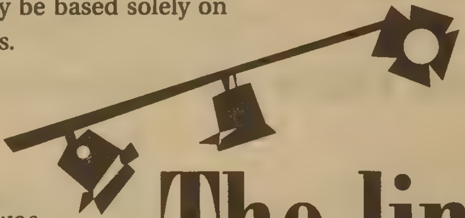
HOURS: M-F 9:30-6:30 SAT 10:30-5:30

Prices Subject to Change Without Notice. Not responsible for typographical errors.



own a record, a generation of artists is coming that's never used pen and paper or brush and canvas.

From editing video on desktop PCs, watching the latest hit motion picture in a window on your computer, to running interactive CD-ROM titles, computers are directly affecting the way we are being entertained. The exciting (or scary) thing about this is the speed at which the technology is progressing and prices are decreasing. The line between professionals and amateurs continues to blur; ultimately, the distinction may be based solely on talent rather than tools.



The line between professionals and amateurs continues to blur; ultimately, the distinction may be based solely on talent rather than tools.

Video Editing

A common theme to all three shows was nonlinear editing. Using digitally stored video, you can piece together a production by constructing a play-order for some or all of the frames. Since the data is stored on a computer hard disk, there is immediate random access to any piece of video. You can create the production in any order you wish, plus you can go back and change things at will. In contrast, videotapes must be edited in the order you want the scenes shown. You don't have the luxury of random access.

Editing videotape is complex and something better left to the experts. Nonlinear editing is more intuitive, which makes it easier to produce the final product. Although you must still rely on tape as a capture and distribution medium, efforts are now being made to allow video to be captured directly into digital format.

The concept of nonlinear editing is not new. In a certain sense, we are only regaining what used to be the norm. Before video came around, everything was nonlinear because it was based on film. When someone puts a movie together, they simply splice it together using raw film footage. If something is too long, they just cut that portion of the film out. If it is too short, they can splice in additional footage.

Tools For Everybody

Everywhere you looked, someone was demonstrating their latest Mac, Windows, or Amiga-based nonlinear editor—24-bit (or close to) color, with storage requirements of around six to eight minutes per gigabyte for good quality output. Most products allowed you to record longer amounts of video, sacrificing display quality, and nearly all used some form of motion JPEG compression.

Mac-based digital video products had extremely high-end capabilities, with a price to match. However, some of the videos I saw created with Radius products were incredible. Aside from the accomplishment of doing it on a desktop computer, the digital imagery and audio were beautiful.

Windows-based nonlinear editors covered a wider spectrum of affordability. There were pro-sumer-level products in the $10,000 to $15,000 range, as well as some at $100,000 and up.

Many of these nonlinear editors did not do real-time effects. For example, if one scene is supposed to dissolve into another, the computer had to "render" the dissolve, essentially creating a new set of frames that show the dissolve. If scenes are rearranged or the effect is changed, the transition has to be rerendered.

On the low end of the price spectrum were the Fast Video Machine (1-800-248-FAST) and the NewTek Video Flyer (913/354-1146). The Fast representative demoed their extremely impressive upcoming Windows-based nonlinear product. NewTek's Amiga-based VideoToaster Flyer was equally impressive. Both of these products will do transition effects in real time.

The Flyer has a definite edge in terms of features and performance. However, with the Amiga's uncertain future, the Fast Video Machine is looking better and better. In any event, for those home video people out there waiting to become the next Steven Spielberg, affordable nonlinear editing is just around the corner.

You'll need multiple gigabytes of storage space for whichever nonlinear editing system you choose. Nicely satisfying that need is a new drive from Micropolis (1-800-395-3748); the model 1991 can store 9.1GB of data. It's a 5.25" full-height SCSI drive. Micropolis was projecting a street price around $4500—that's only 50 cents a meg!

Pinnacle Micro (1-800-553-7070) was showing Orray, an innovative storage system designed around an array of four optical disk drives, providing 5.2GB of storage. This product overcomes the inherent sub-hard disk performance of the magneto-optical medium. A set of the removable disks only costs about $800; the system lists for $14,995.

Sigma Designs (510/770-0100) has an impressive MPEG board for the PC called ReelMagic ($449). The board allows playback of MPEG video at 30 frames per second, although color is limited to 15 bits (32,768 colors). It supports the Philips DigitalVideo disks and the upcoming VideoCD formats. The potential for this product with interactive CDs is very exciting. They have also licensed their technology to Radius for a Mac version.

TVs On Steroids

Whether it's a broadcast TV, a videotape, a laserdisc, interactive CD, or cartridge game, when it all comes down to it, TV is the medium of choice for entertainment. It generally represents the least expensive way to distribute information to masses of people. Does anyone think people are really going to gather around their computer terminals to watch a movie?

Computer monitors and TVs, once distant cousins, are becoming increasingly better acquainted. Adapters are being made to display video signals on computer monitors and to display computer output on TVs. Although computer monitor capabilities have long surpassed NTSC video's 15.75kHz horizontal scanning frequency, the growing computer-based video editing market has created a need for computer

Over 20 shipping points NATIONWIDE!

FastLink Network Products

Network Products for Less!

Coax Ethernet

3COM 3C509/5-Pack/20-Pk	122/516/1,890
3C523B ETHERLINK/MCA/5-Pack	307/1,328
INTEL ETHEREXPRESS 16/5-Pk/20-Pk	115/499/1,869
INTEL ETHEREXPRESS 16 MCA	184
NOVELL/EAGLE NE2000 Plus	109
NE2000 Plus 3/5-Pk	129/421
NE2/2C 16-bit MCA	207
SMC ELITE ULTRA Coax/6Pk/24Pk	110/613/2,275
ETHERCARD ELITE/A FOR PS/2	192
ELITE 32 Dual Segment EISA Coax	657
3COM 3C579 32-bit Coax/5-Pack	247/1,042
EAGLE NE3210 32-Bit EISA CX & TP for WS	220
EAGLE NE3200 32-Bit EISA CX & TP	480
EAGLE NE2/32C 32-Bit MC	440

10 Base-T Twisted Pair Ethernet

3COM 3C509TP0 STARTING AT JUST $75 EACH. No minimum order.

MILAN Transceiver (AUI-BNC)/(AUI-RJ45)	49/49
3COM 3C509TP 16-bit/5-Pk/20-Pk	122/489/1,759
3C509TP0 (w/o DOC or DRIVERS)	75
3C509TP0 16-bit 5-Pk/20-Pk/60-Pk	453/1,639/4,500
3C509 COMBO/5-Pk/20-Pk	145/558/2,070
3C523B 10 Base-T MC/5-Pack	340/1,579
Ethernet Super Bundle (12 ports w/ 5 cards)	1,080
COMBO 16-Bit/5-Pack/20-Pack	131/622/2,208

Intel's New EtherExpress Pro is Faster & Easier to Use at a New Lower Price!

INTEL EtherExpress Pro TP/5-Pk/20-Pk	110/489/1,519
EExpress Pro TP&BNC/5-Pk/20-Pk	110/514/1,898
EExpress Pro TP w/FLASH/5-Pk/20-Pk	124/533/1,672
EEx Pro TP&BNC w/FLASH/5-Pk/20-Pk	124/559/2,050
EExpress Flash 32 COMBO	249
NETWORTH EtherNext 32-Bit 10Base-T/5-Pk	275/1,351
SMC ELITE ULTRA 16TP/6-Pk/24Pk	110/559/2,296
ELITE ULTRA COMBO/6-Pk/24-Pk	127/673/2,365
ELITE 10T/A 10 BaseT MCA	198
ELITE 32C ULTRA EISA Combo	249
ELITE 32T Dual Segment EISA TP	657
3COM 3C579 EISA 10BaseT/5-Pack	247/1,042

100 MegaBit Lan

3COM 3C770A EISA FDDILINK-STP/UTP	1,066/819
3C771A EISA FDDILINK-FIBER	1,436
INTEL EExpress Pro/100 PCI	CALL
EExpress Pro/100 EISA	CALL
National Semi NF3000-F-1 FDDI ISA FIBER	1,336
NF3000-T-1 FDDI ISA UTP/UTP	956/984
NF3500-F-1 FDDI EISA FIBER	1,230

Token Ring

3COM Tokenlink III 16/4/10-Pk	405/3,750
TokenLink III EISA 16/4	585
IBM Token Ring 16/4 Adapter II	513
INTEL Token Express ISA/EISA	372/622
SMC Token Ring Elite 16/4 Single/12-pack	264/2,900

PCMCIA/Parallel Port Adapters

IBM Credit Card Coax/TP Adapter	242/261
Credit Card Token Ring 16/4 Adapter	480
NATIONAL SEMI PCMCIA Ethernet Adapter	189
Additional Media Coupler for Thin/10BT	79
SMC ElitePort EtherNote Combo	235
XIRCOM Pocket Adapter III 10BaseT	293
Pocket ENET III COMBO(BNC & 10BaseT)	330
Pocket Token Ring TYPE1/TYPE3	499
Pocket Ethernet Fax/Modem 10BT/BNC	505
Credit Card Ethernet Adapter BNC or 10BT	250
Credit Card Combo BNC & 10BT	290
Performance Series PCMCIA 10BaseT/Combo	262/310
Performance Series PCMCIA Token Ring	492
Credit Card Ethernet Fax/Modem 10BT	549

Concentrators & MAUs

3COM Linkbuilder TP/12 *(Lowest price 12 port)*	350
ASANTE 8-Port Concentrator/12-Ports	255/506
ALLIED TELESIS 4/8/12 Port (AUI)	209/229/456
MICRODYNE 5318+ 16 ports w/BNC&AUI	547

New Lower Prices on Synoptics 2800 Hubs

SYNOPTICS 800 8-port w/AUI	**294**
2800A 16 ports w/AUI	**572**
2803 16 ports w/AUI	**649**
2804 16 ports w/ FIBER	**875**
SMC 3608TP 8-Port/3512TP 12-port	304/568
Elite 4000C TR Mau 8-port/16-port	723/1,153
MADGE 8 Station Token Ring Hub	490
3COM Linkbuilder TR 3C510180	1,912

SNMP Manageable Concentrators

ASANTE 1012 12 ports Hub	925
1701 12 Ports w/SNMP module	1,065
SNMP Module for 1012	289
ALLIED TELESIS 12 ports w/SNMP module	1,186
3COM Linkbuilder FMS II TP Hub-12 ports	598
Linkbuilder FMS II TP Hub-24 port/48-port	1,102/2,300
Linkbuilder FMS II Management Module	505
DAVID SYSTEMS ExpressNet 12-port w/SNMP	1,248

New Lower Prices on HP Advanced Stack Hubs

HEWLETT PACKARD Advanced Stack 12-port	**622**
Advanced Stack 24-port/48-port	**1,070/2,002**
Advanced Stack SNMP module	**480**

Free HUBVIEW w/ your first purchase of Networth SNAP 16 SNMP Hub!

NETWORTH 3/6/10 Slot Chassis	677/935/2,081
24 Port 10BaseT Module/Smart Module	1,655/2,554
16 Port Snappable Hub	930
16 Port SnapNet Bundle (1 Hub/5 Nic)	1,267
16 Port SnapView Bundle (1 Hub/HubView Sw)	1,296
48 Port Snappable Bundle	2,603
24 Port TriSegment Stackable Hub	1,288
24 Port TriSegment Mgmt. Hub	2,041
PowerPipes Ethernet/FDDI Switching Hub	7,487
SYNOPTICS 810M 8 ports w/ AUI managed	**572**
2814-04/2814-05 16 ports	**1,794/1,246**
3308A 12 Port module	1,105

Network Management

3COM Transcend FMS Mgmt for Windows	352
ASANTE View for Windows (In-Band/Out-of-Band)	710
CHEYENNE Monitrix Network Mgmt.	583
FRYE NetWare Management	339
HEWLETT PACKARD OpenView Interconnect	2,723
OpenView Workgroup Manager	1,420
INTEL LanDesk Manager	1,070
LanDesk SNMP Gateway/Response	569/712
LanDesk Traffic Analyst	720
LanDesk OpenView for Windows	1,789
NOVELL Lanalyzer for Windows v2.1	1,055
NetWare Management System	1,692
NetWare Management Agent (Single)/20PK	338/5,382
NetWare LANalyzer Agent v1.0 (Single)	1,008
NetWare LANalyzer Agent (Multiple Segment)	1,692
NETWORTH HubView or HubView for NMS	733
SABER Lan Workstation 1st node/add 1	129/39

Repeaters

TUT Systems XL1501 (1BNC/1RJ11)	1,029
XL1502 (2BNC/2RJ11)	1,448
XL1503 (1BNC/1RJ11/1AUI)	1,086
XL1504 (4BNC/4RJ11/1AUI)	2,897
XL600+ 600' Repeater (1 Pair)	500
Dual Port Repeater BNC/BNC	293
Quad/Octo Port Repeater (4 BNC/8 BNC)	368/662

Tape Backup Solutions

Bundles Available w/ ArcServe and HP DAT drives. Server based starting at just $ 1,309

CHEYENNE ARCserve v5.01 NLM 5/10	254/510
ARCserve 25/50 users	890/1,082
ARCserve v5.01 100/250 users	1,181/1,536
ARCserve v5.01 500/1000	2,982/5,934
MacAgent/SCO Unix Option	330/337
Changer Option for v5.0/Stacker Option	465/470
PALINDROME Backup Director NLM	569
Network Archivist NLM	1,224
Expansion Module (Doubles Capacity)	576
Archivist Autoloader/Enhanced Autoloader	575/1,445
COLORADO Power Tape 1.1GB w/o Ctrl	650
Power Tape Int. 2GB SCSI Tape Drive w/Ctrl	1,055
Power Tape Ext-25 2 GB SCSI Tape Drive w/Ctrl	1,251
Power Tape 50-4 GB SCSI Tape Drive w/Ctrl	1,664
Power Tape Ext 50-4 GB SCSI Tape Drive w/Ctrl	1,870
CONNER Backup Exec NetWare 3.X/4.X NLM	658

Bridges/Routers

3COM Remote Office 200 Bridge	1,608
Remote Office 201 Router	2,180
NetBuilder Local Ethernet	3,637
NetBuilder Remote	5,146
ROCKWELL NetHopper NH-1 TCP/IP Async Rtr	1,661
NetHopper NH-3 TCP/IP Async Router	2,835
NetHopper NH-P NetWare Async Router	1,375
MOTOROLA DDS/MR56 V.35 or RS232	514
SW 56 II 4-Wire RS232/v.35	639/799
EAGLE NW2000 2-port WAN Adapter/v.35	550/75
MICRODYNE Synchronous+ Wan Adapter v.35	880

Network Modems/Comm. Servers

MICROCOM DeskPorte Fast 28.8 (v.FAST)	523
DeskPorte Fast 28.8 (v.FAST) w/Carbon Copy	576
DeskPorte Fast ES 28.8 Fax/Modem	299
DeskPorte Fast EP 28.8 Fax/Modem	399
MICRODYNE ACS for NetWare Connect	
ENET 4 ports w/ modems/ w/o modems	5,647/4,127
ENET 8 ports w/ modems/ w/o modems	CALL
MICROTEST Ethernet LANModem	1,439
NOVELL NetWare Connect 2/8/32 pts	415/1,583/4,077
NetWare Connect 2-port w/Modems	987
NetWare Connect 8-port w/Modem and Serial I/O	3,811
SHIVA Net Modem/E 9600 BNC	1,567
Lanrover 4E/8E ports w/o modems	2,346/3,145
DIGIBOARD Digi 2-Port for NetWare Connect	200
Digi PC/4E 4-Port/8-Port for NetWare Connect	455/588

Network Printing Solutions

CASTELLE Jetpress XIO BNC/10Base-T	381
Jetpress MIO for HP4/MIO PLUS	349/451
LANPress 10BT (1 PAR)	313
LANPress THIN/10BT (1PAR/1SER)	362
LANPress THICK/10BT (2 PAR/2SER)	512
EAGLE NPE400 1 LPT, BNC & 10BT	350
HEWLETT PACKARD JetDirect 10BT	330
JetDirect Combo BNC/10BT	400
JetDirect Token Ring	562
INTEL Netport EL Ethernet/Token Ring	427/588
NetportExpress XL for Ethernet/Token Ring	475/660
MILAN Fastport 3000 1P/1S, BNC/10BT	459
Fastport 3100	710
Fastport 3500X TR Multi-Protocol	631
XIRCOM Print Server 1 LPT, BNC/10BT	300
Performance Series 1 LPT, COMBO	432
Token Ring Print Server	580

Network Fax Solutions

CASTELLE FaxPress 1000, 10BT/BNC	1,576
CHEYENNE FaxServe NLM 5/10/25	259/331/465
FaxServe NLM 50/100/250	599/800/1,135
FaxServe NLM 500/Unlimited	2,005/3,207
INTEL Satisfaxtion Modem 200/400	244/315
Net Satisfaxtion for 8 fax boards (25 users)	780
Net Satisfaxtion (1000 users)	1,040
DELRINA Winfax Pro for Networks (Server)	125
10/25/100 Users	678/1,492/2,836
Starter Kit (1 Server, 2 nodes)	270

Network CD-ROM

MERIDIAN CD-Net for DOS v4.31 (10 Users)	467
CD-Net for DOS v4.6 (10 Users/WAN)	648
CD-Net for NetWare (NLM-10 Users)	467
CD-Net for NetWare 100/250 Users	938/1,445
MICRO DESIGN SCSI Express for NetWare, MDI	558
SCSI Express for NW3/4, Non-MDI(25 Users)	910
SCSI Express for NW3/4, Non-MDI(1,000 Users)	1,332
CD-Rom LaserBank 600CD Ext. Single/Dual	558/1,117
MICROTEST Discport Ethernet/Token Ring	599/799
Discport w/Plextor Ext. CD-Rom	1,026
Discport w/Plextor 4-Unit CD-Rom	2,598
Discport w/Plextor 8-Unit CD-Rom	3,922

Also Available in Quad Speed Bundles

Uninterruptible Power Supplies

APC BACK-UPS 250/400/450	140/175/210
BACK-UPS 600/900/1250	289/422/561
POWERCHUTE PLUS for Novell/Unix	99/149
SMART-UPS 400/600/600RM/900	310/375/470/517
SMART-UPS 1250/1250RM/2000RM	648/869/1,199

Cable Testers & Supplies

RG58 & RG62 Rachet BNC Crimper/RJ45	45
RG58 Ethernet BNC-Crimp (100 pak)	125
RJ45 10 BaseT Connectors (100 pak)	40
10Base-T Cable (1000' min) LV3/LV 5	100/200
BELDEN PVC RG58 or RG62 Cable (1000' min)	175
PLENUM RG58 or RG62 Cable (1000' min)	350
MICROTEST MT310 TP/COAX Scanner	750
MT350 Value Kit	1,918
Penta Scanner	3,110
Fiber Solution Kit	1,366

Novell Software

Lan WorkPlace for DOS Single/10 Users	290/1,445
Lan Workplace for Mac Single/10 Users	289/1,437
Lan WorkGroup-5/10/20 Users	1,125/1,866/2,613
NetWare for Mac v3.12 200 Users/4.01	685/851
Multiprotocol Router/MPR Router Plus	720/1,032
NetWare NFS Single/5-pk	3,374/10,537
NetWare NFS Starter Kit	1,065
NetWare NFS Gateway 5/10 User	1,069/1,797
Global MHS v2.0 20/50/100 Users	358/648/1,064
MHS v1.5 Network Edition 10/50/100 Users	140/504/733
MHS Multi-Network Edition 10 Users	140
MHS Multi-Network 50/100 Users	504/733
Personal NetWare Single/5-Users	89/290
DOS 7 w/Personal NetWare	89

E-Mail

cc:MAIL Desktop-Any Platform	72
10 users/50 Users	374/1,796
Group Pack 10-pack DOS/WIN	656
Mobile for DOS or MAC	150
Router/Fax	226/1,524
Link to SMTP v2.0/Link to UUCP	2,571/380
MICROSOFT PC Mail Server + 10 Users	485
PC Mail 5/20/100 Users	273/930/3,633
MHS Gateway/PROFS	708/3,405
SMTP/X400/Fax Gateway	3,405/3,405/1,419

Network Utilities

BRIGHTWORKS Fusion Software 100-User	1,164
Automatic Inventory 100-User/250 User	534/763
SYMANTEC Anti-Virus for NetWare	889
SABER Server Manager NLM	499
CHEYENNE InocuLAN (20/250 workstations)	326/655
Utils for NetWare	257
COREL Network (RAID/CDROM/OPTICAL sw)	420
DIRECT ACCESS Network Menu	425
FUNK App Meter	464
FRYE Early Warning System or Lan Directory	339
INTEGRA Oasas RAID (Software Only)	535
INTEL LanDesk Virus Protect (Single)	696
LanDesk Virus Protect 4-pk/20-pk	2,070/6,757
MICROTEST Lan Assist/Map Assist	265/360
SYMANTEC Norton Admin. 5/10 Users	247/438
Norton Admin. 25/50/100 Users	1,068/2,028/3,680

Peer-to-Peer Networking

ARTISOFT LANtastic 6.0 Network Starter Kit	244
LANtastic 6.0 Add-On Kit Coax/10BT	131
LANtastic 6.0 Software Single/5/10 User	99/354/637
LANtastic 6.0 Software 25/50/100	1,272/2,118/3,460
LANtastic Management Serv./Advan	144/578
Central Station NetWare	358
Noderunner/SI Coax or TP/Combo	124/154
Noderunner/SI Coax/TP (5 pack)	423/440
Lantastic for MAC	433
Lantastic for TCP/IP Single/5 Pk	220/883
CorStream 5/10/25 Users	699/1,362/2,209
CorStream 50/100 Users	2,754/4,026
MICROSOFT Windows for Workgroup V3.11	159
WFW V3.11 Add-On for Windows 3.1	69
WFW Starter Kit (Software/Hardware for 2)	399
NATIONAL SEMI Personal NetWare Starter Kit	260
One Station Expansion Kit	161

GROUPWARE

LOTUS Notes Starter Pack for NetWare	959
Starter Pack for Windows	933
Group Pack (1 Server and 10 Nodes)	4,356
Server for OS/2/Win/SCO/AIX/SUN/HPUX	464
Clients for OS/2/Win/MAC/SCO/AIX/SUN/HPUX	464
Client Licenses 1/10/20	415/3,920
Document Imaging Server	2,697
Inbound or Outbound FAX gateway	2,344
Mail gateway for MHS	2,344

WIRELESS LAN

PROXIM RangeLAN ISA Adapter	434
RangeLAN Roaming Software	99
SOLECTEK Wireless ISA Kit (2 cards)	1,494
PCMCIA Wireless Adapter	674
ISA Wireless Adapter	652
AIRLAN/Bridge	CALL
AIRLAN/Hub	CALL

- ***LOWEST PRICE GUARANTEE ! ASK FOR DETAILS.***
- ***NOVELL, SCO, ARTISOFT*** trained & authorized.
- Over 20,000 items from over 700 vendors. Call us for those hard to find items. Our computerized catalog can locate them within seconds.
- **VISA & MASTERCARD** Accepted. NEVER A SURCHARGE.
- Same day shipping & NEXT DAY guaranteed delivery available on most orders.
- Courtesy TERMS available to Government, Education, & Fortune 1500 Accounts.

1-800-788-LANS

HOURS: **M-F 8:00 AM TO 6:00 PM PACIFIC TIME**
ADDRESS: **90 South Spruce Avenue, Suite N**
South San Francisco, CA 94080
PHONE: **415-872-1376** **FAX: 415-872-6634**
e-mail: **fastlink@netcom.com** CODE: MT409

- Fortune 1500 companies, Government, & Education P.O. accepted on approved credit.
- International orders accepted. Payment by Credit Card or Wire Transfer.
- Restocking fee applies to all non-defective returns and refused shipments. ***OPENED SOFTWARE IS NOT RETURNABLE.***
- Prices & Specifications subject to change without notice.
- We are not responsible for typographical errors.
- Shipping & Handling charges will be added to all orders.
- Quantity pricing available for 10 units or more.

Internet users: download our catalog via ftp to netcom5.netcom.com. Filename: /pub/fastlink/fastlink.exe!

Power, Performance and
to Buy Your Next System

Motherboard with CPU

* 386SX-33 w/64K	$89
* 386SX-40 w/64K	$98
* 386DX-40 w/128K	$118
* 486SX-25 w/128K	$168
* 486SX-33 w/128K	$198
* AMD 486DX-40 w/128K	$325
* 486DLC-33 w/128K	$140
* 486DLC-40 w/128K	$148
* 486DX-33/50/DX2-66 w/128K	$320/345/369
* VLB 486DX-33 w/128K	$325
* VLB 486DX-50 w/128K	$395
* VLB 486DX2-66 w/128K	$375
* EISA VLB 486DX-33 w/256K	$385
* EISA VLB 486DX-50 w/256K	$395
* EISA VLB 486DX2-66 w/256K	$430
* GENOA VLB 486DX-33 w/256K	$398
* ORCHID VLB 486DX-33 w/256K	$425
* ASU "ZIF" VLB 486DX-33/50 w/128K	$388/525
* Pentium 60MHz w/512K	$1229

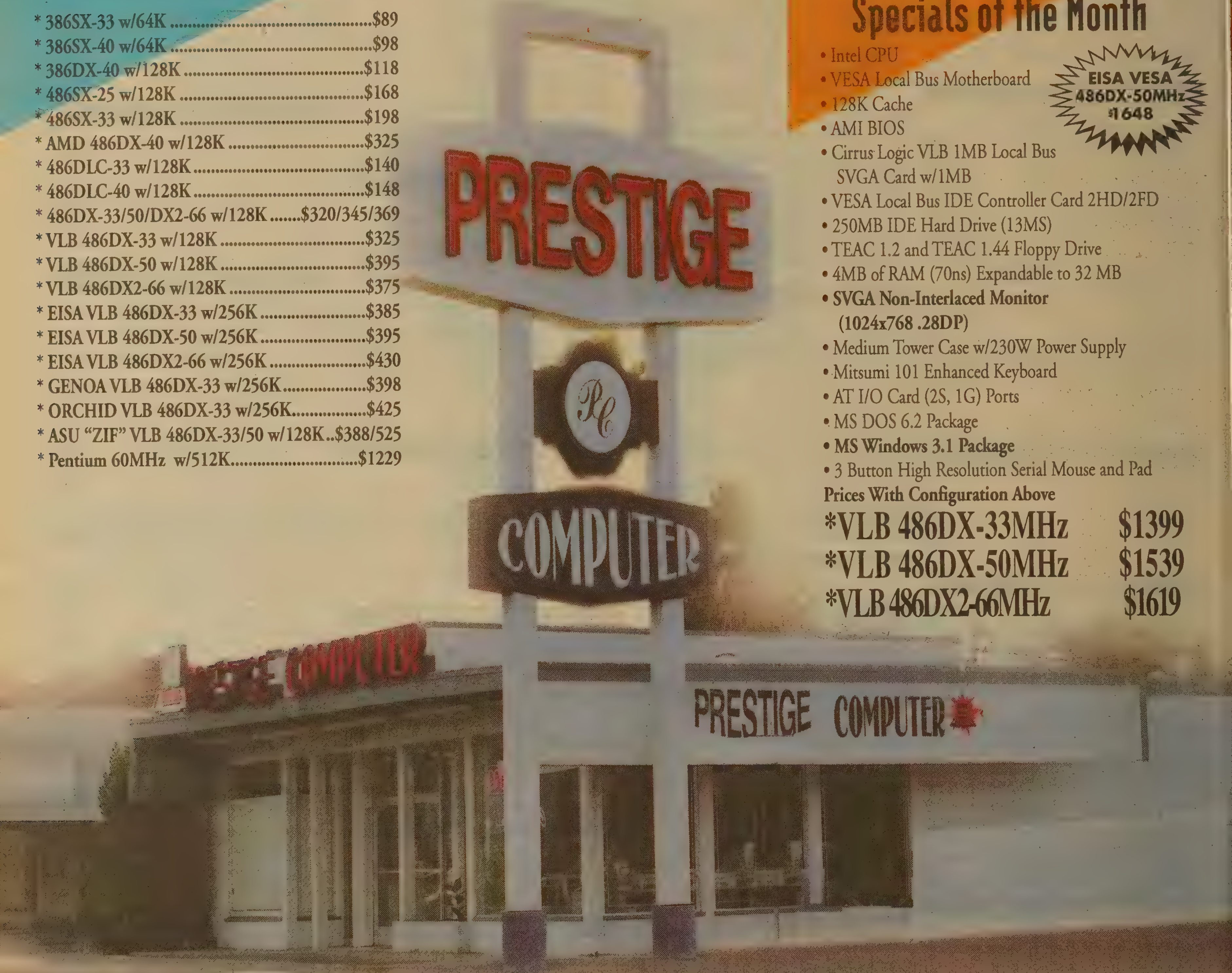
Complete System Specials of the Month

EISA VESA 486DX-50MHz $1648

- Intel CPU
- VESA Local Bus Motherboard
- 128K Cache
- AMI BIOS
- Cirrus Logic VLB 1MB Local Bus SVGA Card w/1MB
- VESA Local Bus IDE Controller Card 2HD/2FD
- 250MB IDE Hard Drive (13MS)
- TEAC 1.2 and TEAC 1.44 Floppy Drive
- 4MB of RAM (70ns) Expandable to 32 MB
- **SVGA Non-Interlaced Monitor (1024x768 .28DP)**
- Medium Tower Case w/230W Power Supply
- Mitsumi 101 Enhanced Keyboard
- AT I/O Card (2S, 1G) Ports
- MS DOS 6.2 Package
- **MS Windows 3.1 Package**
- 3 Button High Resolution Serial Mouse and Pad

Prices With Configuration Above

*VLB 486DX-33MHz	$1399
*VLB 486DX-50MHz	$1539
*VLB 486DX2-66MHz	$1619



Prestige Computer Inc.

408-249-3398 Fax: (408) 249-3392
3248 Stevens Creek Blvd., San Jose, CA 95117
Hours: Monday-Saturday 9:00am-7:00pm; Closed Sunday

Price Aren't the Only Reasons from Prestige Computer

$ave 5% with Cash Purchase (Systems)

VESA-ISA
486DX2-66
$1,188

VESA-ISA
486DX2-50
$1,038

VESA-ISA
486DX-33
$998

EISA-VESA
486DX-50
$1,118

- Mother Board and CPU
- 4 MB Memory Installed 70ns
- 1.2 MB and 1.44 MB Floppy Drives
- IDE HD & FD Controller w/2S/1P/1G
- 130 MB Hard Disk Made By Maxtor
- 14" SVGA Monitor
- SVGA Video Card w/512K
- 101 Enhanced Keyboard
- Mini-Tower Case w/Power Supply
- Serial Mouse

ISA
486DLC-33
$858

ISA
386DX-40
$828

ISA
486DLC-40
$868

EISA-VESA
486DX-33
$1,078

VESA-ISA
Pentium-66
$2,028

VESA-ISA
Pentium-60
$1,878

EISA-VESA
486DX2-66
$1,268

HARD DRIVES

130 MB IDE	$169
170 MB IDE	172
213 MB IDE	179
250 MB IDE	220
420 MB IDE	244
540 MB IDE	329
340 MB SCSI	353
525 MB SCSI	485
1.2 GB SCSI	898

TAPE BACK-UP

COLORADO	
DJ10 120 MB	$118
DJ20 250 MB	158
WANGTEK	
250 MB SCSI	$369
525 MB SCSI	449
CONNER	
Tape-Stor 250 MB	$148

MONITORS

SONY	
1430S 14"	$568
1604S 17"	888
1730S 17"	968
NEC	
3FGE 15"	$569
4FGE 15"	649
5FGE 17"	999
6FGE 21"	2388
IMPRESSION	
SVGA .39DP 14"	$189
SVGA .28DP 14"	228
SVGA .28DP NI 14"	246
VIEWSONIC	
6E NI 14"	$269
15 1280x1024	449
17G 1280x1024	795
20 1600x1280	1695
MITAC	
15 SVGA	$349

FAX/MODEM

ZOLTRIX	
2400B Modem	$35
96/24 Fax/Modem	58
14.4 Fax/Modem	138
U.S. ROBOTIC	
14.4 Int.	$165
14.4 Ext.	195

CD ROM

CREATIVE LABS	
Multi-Media Kit 1	$399
Multi-Media Kit II	449
SONY	
CDU 31A	$165
CDU 33A	210
TOSHIBA	
3401B	$345
TEXEL	
3028	$279

VIDEO CARDS

ORCHID	
Celsius w/1 MB	$215
Fahrenheit VLB	148
Fahrenheit ISA	145
DIAMOND	
Stealth 24 VLB	$148
Stealth Pro VLB	265
Viper VLB 2 MB	369
ATI	
Ultra Plus 2 MB ISA	$245
Ultra Pro 2 MB VLB	395
Ultra Pro 2 MB EISA	495
CIRRUS LOGIC	
SVGA VLB 1 MB	$84
TRIDENT	
8900 1 MB ISA	$58
9200 1 MB VLB	82

MEMBER OF BETTER BUSINESS BUREAU OF SANTA CLARA COUNTY

Warranty

- 1 Year Parts/Labor
- Lifetime Phone Support
- 30 Days DOA Exchange

Services

- Free On-Line Tech Services
- 72 Hours QA and QC Burn in
- Ship Within 48 hours (Unless specified)
- No surcharge for credit cards
- 3% Discount for cash purchase

Quality

- Qualified Engineers
- Knowledgeable Staffs
- Reliable Parts (Tested) TEAC, Maxtor, NEC, Sony, ViewSonic OMNI, Orchid, Diamond, Genoa and Many More

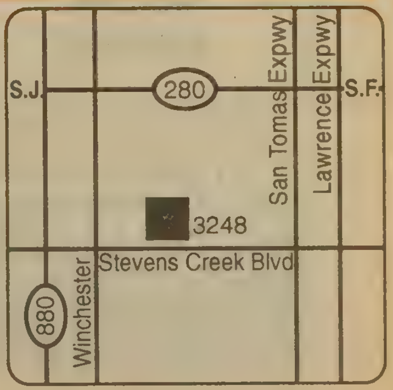
Guarantee

- Customer Satisfaction is our one and only goal!

MasterCard VISA DISCOVER

Terms:

- Freight charges are not refundable
- Damaged shipment is the carrier's responsibility
- Return items must have a RMA# -please call 408-249-3398
- All specifications & prices are subject to change w/o notice
- Dealer inquiries & government POs are welcome
- Credit terms are subject to approval
- Not Responsible For Typos



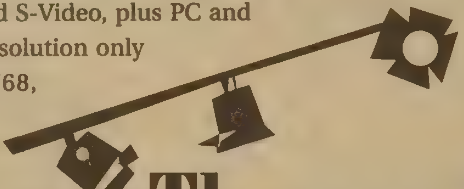
That's Entertainment

continued from page 110

monitors that can also natively display NTSC (and PAL) video.

Manufacturers seem to be cognizant of this need and are releasing more multi-personality monitors. For example, Mitsubishi's new 42" computer monitor supports NTSC, PAL, SECAM, and S-Video, plus PC and Mac displays. Resolution only goes to 800 x 768, however. This baby will only set you back $13,000, so start clearing a (huge) spot for it on your desk.

A major focus of InfoComm was display technology. Virtually every type of display technology imaginable was there, like CRTs, LCD screens, monitor walls, and projection systems. The "Video Projection Shoot-Out" was a huge room filled with over sixty of the projection-type devices from various manufacturers. These were set up side by side, so attendees could compare performance.



Thomas Dolby spoke at Digital World and stressed the importance of getting young artists involved in developing products.

Another area called "War of the Walls" featured the latest in video walls—integrated sets of individual monitors that work in unison. They also had sections displaying HDTV sets, rear-projection TVs, as well as standard CRT monitors.

The need to get computers to talk with the ocean of display devices has created a demand for specialized multifunctional interfaces. Extron Electronics (310/802-8804) is a leader in this field and manufactures computer-video interfaces, switchers, distribution amps, scan converters, etc. Extron's equipment was used to distribute the signals to all of the products in the Shoot-Out.

Anyone remember the 3DBB (three-dimensional blackboard) in the old Tennessee Tuxedo cartoon? Well, VRex (914/345-8877) has come close to bringing a 3DBB to the PC market. First you need a pair of specially polarized glasses. Then using a proprietary display product called VR-1000, virtually any display device becomes three-dimensional! Boy, when the game developers get a hold of this, look out!

Interface

Though not really much in the way of entertainment, I have to mention GyroPoint from Gyration (408/973-7078), a very cool remote pointing device for PCs, Macs, and SGI and Sun workstations. It uses gyro-

EXCELLENCE IN QUALITY & SERVICE
The Networking & Connectivity Specialists

NOVELL. SCO OK SunSoft A Sun Microsystems, Inc. Business

- Authorized Reseller for SCO UNIX, SCO Open Desktop, and SCO Open Enterprise System. Authorized Sunsoft dealer.
- Certified Novell engineers (CNE) on staff.
- We carry a full line of hardware and software solutions for SCO, UNIX and Novell systems

We specialize in Systems Design and Implementation. We offer complete Turn-key multi-user, multi-tasking solutions under Novell, SCO & Sunsoft. Our super servers can support up to 1 GB RAM, multiple Pentium 90 Processors and RAID5 Disk Arrays.

We can network EISA & PCI systems from two to unlimited users. We support up to 1 GB Servers, plus we provide sales, service and support for Multi-Processor systems.

We provide on-site service and Maintenance.

AMI intel
AMI & INTEL SYSTEMS

AMI Enterprise IV, 486DX2/66, EISA-VLB..........$1995
AMI Excaliber Pentium 60, EISA-PCI..........$2395
INTEL Pentium 60, ISA-PCI..........$2195
INTEL Pentium 90, ISA-PCI..........$2295

Above systems Include: 8MB RAM, 340MB Hard Drive, Diamond SpeedStar Pro w/1MB, 1.44 Floppy Drive, Non-Interlaced 14" SVGA Monitor, 101 Keyboard, Mouse, DOS 6.22, Windows 3.11, Mid-tower Case, Lifetime Technical Support and 5 Year Labor Warranty

AST RESEARCH INC.
COMPAQ
EQUINOX
DigiBoard

ALR Advanced Logic Research, Inc. ...Fastest Pentium Available - PC World

Evolution VQ-90 16/540 $6295
Revolution Q-SMP-90 16/540 $6995

Above systems Include: 16MB RAM, 540MB Hard Drive, Diamond SpeedStar Pro w/1MB, 1.44 Floppy Drive, Non-Interlaced 14" SVGA Monitor, 101 Keyboard, Mouse, DOS 6.22, Windows 3.11, Mull-tower Case, Lifetime Technical Support and 5 Year Labor Warranty
We carry the complete line of ALR Products Call for complete information and pricing!

HIGH QUALITY SYSTEMS
586 Pentium-90..........$2095
486DX2-66..........$1295
486DX-33..........$1195

Above systems include: Intel cpu, 4MB RAM, 200MB IDE Hard Drive, 1.44MB Floppy Drive, IDE Controller, Diamond Speedstar Pro w/1MB, Non-Interlaced Monitor, Mouse, 101 Keyboard, DOS 6.22, Mid-Tower Case, Lifetime Technical Support, 5 Years Labor Warranty

HEWLETT PACKARD Authorized Dealer
PRINTERS
520..........$295
560C..........595
1200C..........1395
4P..........975
4+/4M+..........CALL
4si/4siMX..........CALL

510-906-1690
Fax (510) 906-1699
1554 Newell Avenue,
Walnut Creek, CA 94596
Hours: M-F 9-6 Sat 11-3

Systems Unlimited
Systems & Enterprise Wide Networking
Closed last Saturday of the month • Prices subject to change w/o notice

INDUSTRIAL COMPUTERS

Direct from manufacturer *Made in Silicon Valley, U.S.A.*

The Best Quality, Cost Effectiveness & FREE Technical Support!

EIT, Inc. provides the systems directly from the manufacturer, providing our customers with the solution for their needs: Best Quality, Highest Performance, as well as Cost Savings. Also, we continuously support our customers with technical matters, guaranteeing that our products will serve you in its Optimum condition at all times. Once you choose us, you will never have to do the right job with the wrong tools! Call EIT, Inc. for Pricing & More Information.

Wall Mount Industrial Chassis

- Rugged Industrial Compact Package
- 6 AT slot Passive Backplane
- 100 Watt Power Supply
- Extra Cooling Fan
- Bench Top or Bulkhead Mount
- Two 3.5" Drive Support
- Vibration Protect Design

19" Rack Mount Monitor Case

- Anti-Glare Screen
- Shielded Electronics
- Optional Touchscreen

19" Rack Mount Chassis

- 8 to 20 Slots
- 8 Drive Bays
- Dust Proof Cooling Fan
- Vibration Protection
- Security Lock
- 250 Watt Power Supply
- Special/High P/S Available

19" Rack Mount Keyboard Case

- Heavy Duty Steel Construction
- IBM PC AT Fully Compatible
- Includes Keyboard, Rail & Mouse Holder

Full Featured CPU Card

- 80286 to Pentium CPU
- ISA/EISA/VESA
- All Speeds
- 256KB Cache (80486)
- IDE Controller Built-in
- Watchdog Timer
- 72 Hours Burn-in Test

Passive Backplane

- 4 Slot to 20 Slot
- ISA/EISA/VESA
- Segmentation Available

20 different types of Chassis • Luxury or Economy Edition Custom Chassis Available

Government, Corporate, University & VAR inquiries and PO's Are Welcome. Your Complete Industrial Computer Solutions. Industrial Solutions With Personal Service. Volume Discounts Available.

EIT

Electro-Integrated Technology, Inc.

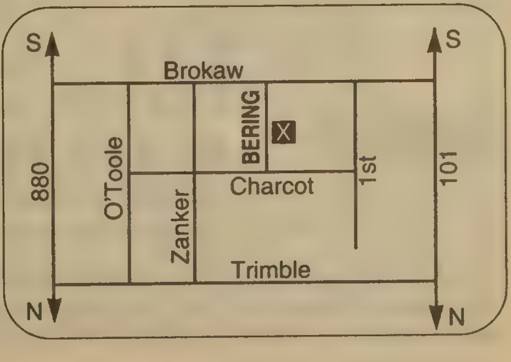
2151 Bering Drive
San Jose, CA 95131

(408) 321-9030

FAX: (408) 321-9032

Hours: 8am - 6pm

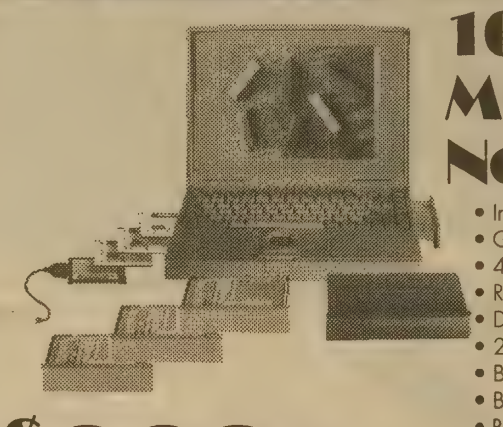
Outside of Cal. 1-800-EIT-0852



CITY COMPUTERS

Specials are Priced To Move • Act Now and Save!

100% Modular Multimedia Color Notebook



- Intel 486DX2/50MHz CPU (Upgradeable to DX4/75)
- Green Motherboard w/Flash ROM
- 4MB RAM (Exp. to 20MB)
- Removable 250MB HD, Floppy Drive
- Dual Scan Color LCD w/1MB VLB Video
- 2 PCMCIA Type II or Type III
- Built-in Speaker, Microphone, Trackball
- Built-in Sound Blaster and MS Sound Compatible
- Removable Battery Packs, Fast Charge –1.5 hours
- AC adapter 90-260 VAC 50/60Hz
- Weight 5.7 lbs.
- **Call for prices on other configurations and PCMCIA Cards**

EVEREX
EVER for EXcellence®
STEP™ Note

$2235

Back To School SPECIAL SALE!!!

Zoltrix 14.4 Send & Receive Fax Modem with Software $65
Mitsumi Double Speed CD ROM, Cards & Cables Included...$129

Green VLB 486
- 486 DX2-66MHz w/128K
- 4MB-70ns RAM
- 512K SVGA Video Card
- 14" SVGA .28mm Monitor
- 200MB Hard Drive
- IDE Controller w/2S/1P
- 1.44MB Floppy Drive
- 101 Enhanced Keyboard
- Mini-Tower Case w/PS
- Microsoft Compatible Mouse

$1099

Upgrades
340MB HD Drive....Add $40
420MB HD Drive....Add $60
540MB HD Drive...Add $140

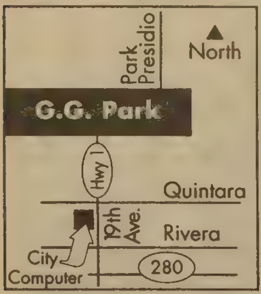
Limited Time Offer!
FREE
AUDIO PLUS Sound Card or INTEGRA Modem
w/SYSTEM PURCHASE!

Pentium PCI Systems
- Intel Pentium CPU w/256K
- 8MB-70ns RAM
- 1MB SVGA Video Card
- 15" NI SVGA .28mm Monitor
- 340MB Hard Drive
- IDE Controller w/2S/1P
- 1.44MB Floppy Drive
- 101 Enhanced Keyboard
- Medium-Tower Case w/PS
- Microsoft Compatible Mouse

Pentium 60/66/90
$CALL

Upgrades
420MB HD Drive......Add $20
540MB HD Drive ...Add $100

SALES
SERVICES
—NETWORKING—



City Computers, Inc.
2145 19th Avenue • San Francisco, CA 94116
Tel 415-661-7038 • Fax 415-566-1861
Extended Hours to serve Better!
Open: Mon-Fri 10-7 • Sat-Sun 10-6
FREE parking available behind building
Prices reflect cash discount. Prices & specs subject to change w/o notice. Not responsible for typos. Government PO's welcome
VISA
MasterCard

That's Entertainment *continued*

scopes to sense the motion of a person's hand. The gyroscope mechanism provides mid-air resistance, making it easy to precisely move the mouse pointer. It was many times easier to use than an infrared-based remote device I tried. Plus you don't have to point it directly at any type of receiver unit.

Another neat computer input device was SoftBoard by Microfield Graphics (503/626-9393). It looks basically like a large whiteboard. Using special dry markers, you can write on the board and have it simultaneously appear on a PC or Mac monitor. Laserbeams are used to triangulate the marker's location. Bar codes are built into the markers near the tip which tell the computer what color is being used. Also featured is real-time remote transmission using a modem and ordinary telephone lines.

Titles And Tools

So many interactive CD products are just plain boring. Too many developers are more excited about technical achievements than the basic entertainment value of the finished product, yet the latter is really what's important for financial success.

Some big-name musicians are now taking the desktop PC market seriously. Real creative forces, these innovators should have a big hand in shaping the future of multimedia.

Thomas Dolby's company, Headspace, has developed something they call AVRe (Audio Virtual Reality Engine). This product overcomes a basic problem with essentially all CD titles: the music track is not dynamic. AVRe changes the music to fit the mood of the video. Very cool. Dolby spoke at Digital World and stressed the importance of getting young artists involved in developing products. His message: Kids don't want to get a guitar and join a band anymore, they want a computer.

Peter Gabriel also spoke at Digital World and showed off his CD, XPlora 1—Peter Gabriel's Secret World. The one formerly known as Prince and David Bowie also have interactive CDs, which were demonstrated at the show.

An upcoming interactive CD game called Loadstar was very exciting. The production of this title brought together Hollywood moviemaking techniques and software game design. Real actors were used too. The SegaCD version was pretty good, but I can't wait to see a 3DO version. Lots of space ships and fighting! ■

Copyright © 1994 by Douglas J. Nakakihara. All rights reserved.

AMERICAN COMPUTER RESEARCH

BRINGS YOU

LIFETIME LABOR WARRANTY

Special For This Month!

Super Prices In Town!

PREMIUM SYSTEMS

386SX-40	732
386DX-40/64K	752
486SX-25/128K	812
486SX-33/128K	839
486DLC-40/128K VLB	812
486SLC2-50 IBM ISA	822
486DX2-66/128K VLB	982
486DX-33/128K ASUS EISA VLB	1,102
486DX2-66/128K ASUS EISA VLB	1,142
486SLC2-66/64K IBM VLB	862
486DLC-33/128K VLB	812
486DLC-40/128K VLB	822
486DX-33/128K VLB	872
486DX-40/128K VLB	882
486DX2-50/128K VLB	902
486DX2-66/128K VLB	972
486DX2-66/256K PCI	1,102
Pentium P5-60/256K VLB/PCI	1,492
Pentium P5-66/256K VLB/PCI	1,622
Pentium P5-90/256K VLB/PCI	1,762

SYSTEM CONFIGURATION

- Motherboard w/CPU
- 4 MB RAM 70NS
- 200MB HDD
- 1.2MB and 1.44MB Floppy Drive
- IDE 2HD/2FD Controller w/2S/1P/1G
- 512KB SVGA Card
- 14" SVGA .28 Color Monitor
- 101-Key Enhanced Keyboard
- Enhanced Case w/Power Supply
- Microsoft Compatible Mouse w/Pad

UPGRADES

• 250MB Hard Drive	Add $60
• 340MB Hard Drive	Add $90
• 420MB Hard Drive	Add $110
• 540MB Hard Drive	Add $180
• 14" Non-Interlaced Monitor	Add $20
• 15" Non-Interlaced Monitor	Add $100
• VLB IDE Controller	Add $20
• PCI Bus VGA Card w/1MB	Add $90
• 16BIT SVGA Card w/1MB	Add $20
• Cirrus Logic/Trident VLB w/1MB	Add$30
• Window Accelerator w/1MB	Add $20
• Orchid Fahrenheit 1280	Add $90
• Diamond S.S. Pro VLB w/1MB	Add $60
• 250MB Tape Back-up	Add $130
• 16BIT Ethernet Card	Add $32
• Deluxe Speakers	Add $8
• Mitsumi CD-ROM w/Card	Add $80
• Double Speed CD-ROM w/Card	Add $140
• Sound Blaster Pro Deluxe	Add $80

Special This Month!

Maxtor

IDE HARD DRIVES

245 MB	7245A	15ms	3.5"x1"	$175
345MB	7345A	14ms	3.5"x1"	$195
540MB	7546	12ms	3.5"	$298

CONNER

IDE HARD DRIVES

250MB	CP30254	14ms	3.5"x1"	$170
340MB	CPF3340A	13ms	3.5"x1"	$195
420MB	CPS420A	<12ms	3.5"x1"	$225
540MB	CP30544	<12ms	3.5"x1"	$295

WESTERN DIGITAL

IDE HARD DRIVES

250MB	WD2250	13ms	3.5"x1"	$175
340MB	WD2340	12ms	3.5"x1"	$195
420MB	WD2420	13ms	3.5"x1"	$225
540MB	WD2540	12ms	3.5"x1"	$300

MOTHERBOARD

AMI	
Super Voyager II 486-33 256k VLB, 7 Slots	$625
Super Voyager II 486-DX2-66 VLB, 7 Slots	$749
Enterprise IV 486-33 256k EISA VLB	$735
Enterprise IV 486-DX2-66 256k EISA VLB	$935
ALARIS (IBM)	
486BL3X-75MHz VLB w. CPU & Math Proc.	$439
486SLC-33 / 66 16k Internal cache ISA v.2 w. CPU & Math Proc.	$235
486SLC2-66 64k VLB w/CPU & Math Proc.	$269
MICRONICS	
JX30 486-DX2-66 256k VLB w. Zif socket	$285
486-33 256k EISA VLB	$495
486-DX2-66 256k EISA E2	$395
PCI 586-60 256k ISA 3PCI slots	$495

CASE WITH POWER SUPPLY

Mini Tower Case w/200W Power Supply	$37
Desktop AT Case w/200W Power Supply	$43
Medium Tower Case w/230W Power Supply	$62
Full Tower Case w/250W Power Supply	$76
UPS 400VA / 600VA / 900VA	$170 / 250 /360

CD-ROM / MULTIMEDIA

Creative Labs	
Sound Blaster	$55
Sound Blaster Pro	$74
Sound Blaster 16 Basic	$93
Sound Blaster 16 MCD	$105
Discovery CD 16 Upgrade Kit	$296
Edutainment CD 16 Upgrade Kit	$386
GameBlaster CD 16 Upgrade Kit	$365
WaveBlaster	$169
Diamond Sonic (AT / SCSI)	$92 / 204
Mediavision	
Pro Audio Spectrum 16	$94
Pro Audio Studio 16	$128
Premium Sound 3D	$149
Wavetable Upgrade	$CALL
Chinon CDS535 (Int.) SCSI	$288
Mitsumi CD-ROM (Double Speed) w/Card	$136
NEC CDR 510 Triple Speed SCSI Internal	$332
NEC 3xi (CDR 500) Triple Speed SCSI Internal	$430
Panasonic CD-562 (Double Speed) w/Card	$136
SONY CD-ROM (Double Speed) w/Card	$136
TEAC CD-50 (SCSI-2) Internal	$185
PLEXTOR (Texel)	
DM3028 (SCSI) Internal	$298
Toshiba XM-3401B (SCSI) Int / Ext	$274 / 358
Trantor SCSI Host w/Driver	$48
Deluxe Speakers	$8
16-Bit Audio Card	$88
Double-Speed CD-ROM	$100

PRINTERS

Canon BJ 200e	$259
Panasonic 2123	$240
Deskjet 1200c / Postscript	$1,375 / 1,975
Deskjet 500 / 500c / 550c	$295 / 395 / 499
HP Laserjet 4 / 4M / 4L / 4ML	$1,365 / 1,865 / 635 / 998

FLOPPY DRIVE / TAPE BACKUP

TEAC 1.2MB 5.25	$45
TEAC 1.44MB 3.5/WFrame	$35 / 42
TEAC Dual Floppy Drive 1.2 & 1.44MB	$98
Colorado Tape Backup 120MB	$94
Colorado Tape Backup 250MB	$154
Archive 250MB Tape Backup Floppy Con.	$160

NETWORK CARD / SOFTWARES

3COM	
3C509-16 Etherlink III 16 bit Coax/TP	$118 / 118
COMPULAN	
NE 600E 16 bit TP	$75
NE 200E 16 bit Coax	$65
NOVELL CARDS	
NE2000 16 bit Coax	$130
NE2000 16 bit TP	$135
NOVELL SOFTWARE	
Netware 3.12 for 5 / 10 / 20 Users	$595 / 1,290 / 1,895
Netware 4.01 for 5 / 10 / 20 Users	$820 / 1,820 / 2,630

SCANNERS

ScanJet IICX Color w/Kit	$985
ArtiScan Scanner 600 / 800 / 1200	$815 / 915 / 1,185

SOFTWARES

Personal Netware Software	$85
Microsoft DOS 6.2	$40
Microsoft Windows 3.1	$45
CD-ROM Softwares	$Call

MONITORS

NEC 3V 15" Flat Screen	$454
NEC 4FGe 15" Flat Screen	$603
NEC 5FGe 17" Flat Screen	$948
NEC 5FGp 17" Flat Screen	$1,078
NEC 6FGp 21" Flat Screen	$1,985
Viewsonic 6E 14" 0.28DP	$256
Viewsonic 15E 15" 0.28DP	$356
Viewsonic 17 17" 0.28DP	$916
Viewsonic 20 20" 0.28DP	$1,460
Viewsonic 21 21" 0.26DP	$1,698
Mag 15F 15" 0.28DP (PC Editor Choice)	$368
Mag 17 17" 0.26DP SVGA Monitor	$668
14" SVGA 1024x768 .39	$174
14" SVGA 1024x768 .28 Internal	$196
14" SVGA 1024x768 .28 NI	$208
Hanao F340iw	$629
Nanao F550iw	$920
Nanao F560iw	$1160

VIDEO CARD-VLB-VIDEO CARDS

SVGA 1MB 1024•768 16 Bit	$54
Window Accelerators w/1MB	$54
Cirrus Logic VLB w/1MB	$66
Trident VLB w/1MB	$66
ATI	
Ultra 1MB w/Mouse	$150
Wonder PCI/VLB/ISA 1MB DRAM	$128
Ultra Plus PCI/VLB/ISA 2MB DRAM	$188
Ultra Pro ISA 1MB/2MB DRAM	$128/178
Ultra Pro VLB 1MB/2MB DRAM	$128/178
Ultra Pro VLB/PCI 2MB (VRAM)	$238
Ultra Pro EISA 2MB (VRAM)	$298
Winturbo 64 VLB/PCI/ISA 2MB (VRAM)	$350
Diamond	
Speed Star Pro 1MB (ISA)/(VLB)	$96/96
Stealth 24 ISA/VLB 1MB	$126
Stealth 32 PCI 1MB/2MB	$154/208
Stealth Pro ISA/VLB 1MB (VRAM)	$208
Stealth Pro VLB 2MB (VRAM)	$288
Viper 2MB (VLB)/(PCI)	$304/304
Genoa 8500 VLB 1MB	$88
Orchid	
Kelvin VLB (64-Bit) 1MB/2MB	$138/184
Kelvin PCI (64-Bit) 1MB/2MB	$138/178

FAX / MODEM

Zoltrix 14.4K V.32bis, V.42bis I/E	$85 / 138
US Robotics Sportster 14.4K I/E	$102 / 122
US Robotics Courier Series	$Call
Intel SatisfaxtionModem/400e	$280
Intel Fax/Modem 14.4K	$125
14.4 Fax/Modem	$64
Hayes Optima 28.8 V. FC Ext	$435
USR Sportster 28.8 Int/Ext	$195/220

CONTROLLERS

IDE 2FD/2HD with 2S/1P/1G	$11
IDE with I/O for VESA Local Bus	$18
Enhanced I/O (2S/1P) w/16550 UART Chip	$26
IDE I/O (2S/1P) w/16550 UART Chip	$34
VLB IDE I/O (2S/1P) w/16550 UART Chip	$34
Adaptec	
1542CF (SCSI)	$158
1542CFK w/Kit (SCSI)	$228
2742 EISA (SCSI)	$220
2742TK EISA (SCSI)	$338
2742T EISA (Twin SCSI)	$268
2842 VLB SCSI	$234
2940 PCI/SCSI	$208
BusLogic 445S VLB (SCSI)	$213
BusLogic 742K EISA (SCSI)	$208
DTC 2290 EISA IDE	$114
DTC 2280 ISA IDE	$14
DTC 2278 VLB IDE	$26
Promise DC-200 IDE Cache Controller	$86
Promise DC-420 VLB w/512K Cache	$96
Promise DC-4030 VLB IDE Cache Controller	$100

Terms and Conditions

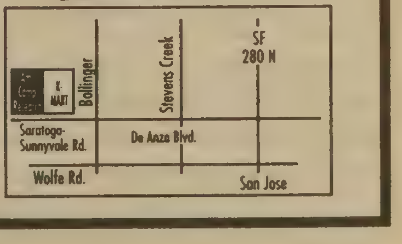
1. One year parts and lifetime labor warranty on systems.
2. Prices reflect cash discount.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. Not responsible for typos.
8. All returns subject to 20% restocking fee.
9. Purchase orders are welcome and subject to approval.

VISA MasterCard

PC UPGRADES WELCOME

American Computer
Research, Inc.
Phone: 408-257-8998
Fax: 408-257-9158
1001 South Saratoga Sunnyvale Rd., San Jose, CA 95129
Hours: 9:00 to 6:00 Mon-Fri
10:00 to 5:00 Sat

CALL FOR CUSTOM SYSTEMS



Total Clearance In The Intellectual Property Jungle

BY MARY EISENHART

A couple years back at the Digital World conference, one of the most impassioned panel discussions in the industry's history centered on the hypothetical case of an educational multimedia developer who, failing to secure permission from the copyright holder of *West Side Story*, decided to lift a short clip from the movie and incorporate it into his product anyway, claiming "fair use."

The Beverly Hilton echoed with outraged howls from panelists and audience members, whose attitudes ranged from "I'm an educator and I can do whatever I want" to "There's no such thing as fair use" to the ubiquitous "Hell, nobody's got any idea what this stuff is worth anyway."

New media raise new issues, not least of which is the use of intellectual property expressed in other media. Even the mighty Disney empire discovered this to its cost a few years ago when singer Peggy Lee, who warbled a few tunes on the soundtrack to the early-'50s *Lady and the Tramp*, successfully persuaded a court that she was entitled to major compensation for the fact that Disney had been blithely reselling her voice on videocassettes for years, on the apparent assumption that the movie contract gave them all-media rights.

While the multimedia development community still probably includes a few clue-impaired souls who regard preexisting content as a vast unrestricted candy store, other would-be providers are so intimidated by the legalities that they don't even consider how much that *Terminator 2* clip might enhance their product.

This, says Jill Alofs, is a mistake.

Alofs is in the business of securing clearances from copyright holders that allow developers to reuse existing intellectual property in their products. Just over two years ago, after becoming something of an in-house expert on the subject at Lucasfilm, she founded Total Clearance in Mill Valley to provide a cost-effective fix for a burgeoning legal nightmare.

Her clients include large and small developers, as well as the law firms that work for them. She finds that law firms are attracted to her services because "oftentimes when they call as a legal department or a general counsel, they run across difficulties because the other parties on the other end, whether they are the trustees or the talent themselves, feel that they need to get their attorneys involved."

She's negotiated rights for clips ranging from *The Dick Van Dyke Show* to *When Harry Met Sally*, in a multimedia universe where the rules are being improvised minute to minute—a situation that's both a

"NAIVETÉ IS NOT GOING TO COVER YOU. ACTING IN GOOD FAITH IS NOT GOING TO COVER YOU."

continued on page 318

OPEN 6 DAYS A WEEK!

BEST PRICES • HIGHEST QUALITY • GREAT SERVICE

SYSTEM		MB +CPU	BASIC SYSTEM
		NICE MB	
EISA/VESA 486DX2-66 (NICE) (2 Slots Local Bus, 3 EISA, 2 ISA)	256K	$550	$693
486DX-50 (NICE) (2 Slots Local Bus, 3 EISA, 2 ISA)	256K	560	703
486DX-33 (NICE) (2 Slots Local Bus, 3 EISA, 2 ISA)	256K	435	600
ISA 486DX2-66 (2 Local Bus)	256K	479	644
486DX-50 (2 Local Bus)	256K	489	654
486DX-33 (2 Local Bus)	256K	378	543

SYSTEMS		MB +CPU	BASIC SYSTEM
		AIR MB	
EISA/VESA 486DX2-66 (AIR) (3 Slots Local Bus)	256K	$764	$929
486DX-50 (AIR) (3 Slots Local Bus)	256K	720	885
486DX-33 (AIR) (3 Slots Local Bus)	256K	585	750
ISA 486DX2-66 (AIR) (3 Slots Local Bus)	256K	469	634
486DX-50 (AIR) (3 Slots Local Bus)	256K	479	644
486DX-33 (AIR) (3 Slots Local Bus)	256K	368	533

SYSTEMS		MB +CPU	BASIC SYSTEM
		GENOA MB	
486DX-50 (GENOA) (3 Slots Local Bus)	256K	$485	$630
486DX-33 (GENOA) (3 Slots Local Bus)	256K	359	524
486DX-50 (3 Slots Local Bus)	256K	465	610
486DX-33 (3 Slots Local Bus)	256K	339	484
486DX-50 (2 Slots Local Bus)	256K	465	610
386-40	128K	79	254

BASIC SYSTEM INCLUDES: 486/386/286 Motherboard • 486/386/286 CPU • 1 MB RAM • 101 Keyboard • 1.2 MB or 1.44 MB Floppy Drive
Baby AT or Mini Tower Case with Power Supply • 2FDD & 2HDD Controller Card w/Cable

REPAIR & UPGRADE YOUR SYSTEM $25 FLAT FEE ON LABOR!

• 1 Year Warranty Parts & Labor

CALL FOR LATEST PRICES

CASE W/POWER SUPPLY

Mini Tower Case w/200W PS	$38
DeskTop Case w/200W PS	40
Medium Tower Case w/230W PS	57
Full Tower Case w/250W PS	77

MONITORS

14" Mono	$70
14" VGA Mono	87
14" Super VGA 1024x768 .39	176
14" Super VGA 1024x768 .28 Int	199
14" Super VGA 1024x768 .28 NI	208
14" Soco Super VGA 1024x768 .28 Int	215
14" ViewSonic 6E NI	235
15" ViewSonic	420
17" 1600x1280 .28	900

MOTHERBOARDS W/O CPU

EISA	
486DX2-66, DX-50, DX-33	$335
(3 Slots Local Bus (AIR) w/256K)	
486DX-33/50 Mini EISA 256K (NICE)	211
(2 Slots LB, 3 EISA, 5 ISA, Overdrive)	
ISA	
GENOA	
486DX2-66/DX-50/DX-33 (3 Slots Local Bus (Genoa) w/256K	$105
486DX2-66, DX-50, DX-33 (3 Slots Local Bus (AIR) w/256K	115
486DX2-66/DX-50/DX-33 (2 Slots Local Bus, 2-72 Pin, 8-36 Pin Memory Slots) w/256K	100
486DX2-66/DX-50/DX-33 (Nice)	128
486DX2-66, DX-50, DX-33 (2 Slots Local Bus) w/256K	83
IBM	
IBM 486SLC2-66/64C VLB w/387-33 w/CPU VLB Motherboard	$190
IBM 486SLC V-25/50 w/387-25 w/CPU	165
386-40 MHz w/128K	67
386-SX40 w/CPU	59

FLOPPY & HARD DRIVES

FLOPPY DRIVES	
Teac 2.88 MB FDD	$85
Teac 1.2 MB FDD	42
Teac 1.44 MB FDD	34
MAXTOR	
7171A 171MB 15ms	$150
7245A 245 MB 15ms	192
7345A 345MB	196
CONNER	
210 MB	$165
340 MB	195
IBM 256 MB	210
Quantum 540 MB	300

KEYBOARDS/MOUSE

101 Keyboard	$12
MaxiSwitch 101 Enhanced	22
Chicony	26
Keytronics 101 Enhanced	25
Trackball	19
Logitech Mouseman	32
Microsoft Mouse	25
3 Button Microsoft Compat	7

VIDEO CARDS

MGP Card	$10
VGA 800x600 256K	25
SVGA 1024x768 512K	34
SVGA 1024x768 1 MB	52
Windows Accelerator w/1 MB	55
ATI Ultra Plus 2 MB DRAM	199
ATI Ultra Pro 2 MB VRAM VL	295
Diamond Viper VLB 2 MB	300
Diamond Stealth 1 MB VL VGA	130
Genoa 8500 VL	87
Genoa Phantom W32i 2 MB	154

CONTROLLER CARDS

IDE 2FDD/2 HDD 1:1	$12
IDE VL FDD/2 HDD 1:1	22
SCSI Controller	48
SCSI Adaptec 1542C	160
DC200N ISA 512K On Board (Promise)	110
DC200 ISA 512K/16M (Promise)	97
DC420 VLB 512K On Board (Promise)	105
DC4030 VL 512K/16M (Promise)	110

NETWORK

Ethernet	
NE 2000 16 Bit	$33
NE 2000 16 Bit Software Config.	34
NE 2000 Combo	37
NE 2000 16 Bit Combo Soft. Config.	39
3C509TO Etherlink III.	90
Arcnet LANCard	
8-Bit Star Topology	$33
16-Bit Star Topology	50
8-Bit Bus/Star/BNC/UTP	38
16-Bit Bus/Star/Coax/UTP	38
8-Port Coax Active Hub	149
4-Port External Passive Hub	14

MODEM CARD/FAXES

2400 Internal Modem	$24
Fax/Modem (9600Fax/2400 Modem)	32
14.4/14.4 Fax/Modem	65

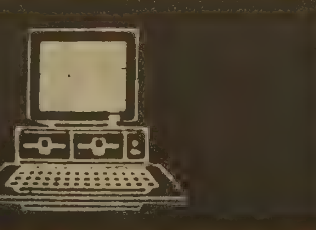
SOUND CARDS

Sound Blaster Deluxe	$71
Sound Blaster Pro Deluxe	99
Sound Blaster 16 Basic	93
Diamond Sonic Sound Card	215
Media Vision Pro Audio Spectrum 16	129
Deluxe Speakers	8

MISCELLANEOUS

Super I/O	$13
AT I/O Card (2S/1P/1G)	10
120 MB Tape Back-Up	99
250 MB Tape Back-Up	135
Tape Cartridge	15
JT-10 Trakker 120 MB Ext	285
ST-20 Trakker 240 MB Ext	322
PT-25 Power Tape 2.4 GB Int	950
PT-50 Power Tape 4 GB Int	1464

DEALER INQUIRIES WELCOME



SONIC COMPUTER

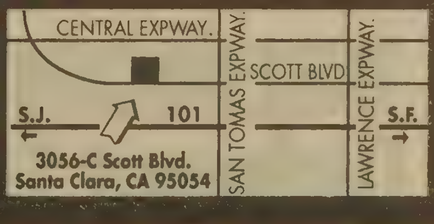
"ALL THE BEST FOR WAY LESS"

(408) 727-4362
Fax: (408) 727-5528
3056-C Scott Blvd.
Santa Clara, CA 95054

OPEN 6 DAYS A WEEK
MON-FRI: 9-6PM
SAT: 10-5PM

Prices Subject To Change w/o Notice •Cashiers Check •Money Order •Visa/Master/ATM Accepted

DEALER INQUIRIES WELCOME



THE BEST PRICE IN TOWN!

486Dx2-66MHz 128K Cache

w/ Intel CPU .. $475
w/ AMD CPU .. $445

- 1MB Expandable to 32MB on Board
- 8K Internal Cache
- 128K External Cache Exp. to 256K
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486DX2-50MHz 128K Cache

w/ Intel CPU .. $455
w/ Cyrix CPU .. $400

- 1MB Expandable to 32MB on Board
- 8K Internal Cache
- 128K External Cache Exp. to 256K
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486DX-33MHz 128K Cache

w/ Intel CPU .. $440
w/ Cyrix CPU .. $360

- 1MB Expandable to 32MB on Board
- 8K Internal Cache
- 128K External Cache Exp. to 256K
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

$315

486SX-33MHz
128K CACHE

Intel 80486SX-33MHz CPU

- 1MB Expandable to 32MB on Board
- 8K Internal Cache
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop case w/power supply
- 101 Enhanced Keyboard

486SX-25MHz w/128K Cache $290

Optional for 486 Systems

VESA Local Bus Motherboard	Add $10
AIR VESA Local Bus Motherboard.	Add $50
Micronics VESA Local Bus Motherboard	Add $195
VESA/EISA Motherboard	Add $120
PCI Motherboard	Add $120
VESA IDE CARD	Add $10
VESA SVGA Card w/1MB	Add $70
SpeedStar 24X	Add $80
Orchid Kelvin 64 VESA w/1MB RAM	Add $135

OPTIONAL
w/ system purchase

14" Mono Monitor & Card	$95
Super VGA Monitor (1024x768 0.39) w/SVGA Card 512K	$220
Super VGA Monitor (1024x768 0.28) w/SVGA Card 512K	$245
Non-Interlaced SVGA Monitor (1024x768 0.28) w/1MB Card	$270

NOVELL®

Sales...
Custom Design Service...
Installation and Maintenance...
Extended Software Support...

Available through
STEPFORD
(415) 553-3837

586 Pentium 90MHz VESA/ PCI
$1275

- 1MB Expandable to 128MB
- 256K Cache
- 3 VESA Local Bus or 3 PCI Slots
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop Case w/Power Supply
- 101 Keyboard

586 Pentium 66MHz VESA/ PCI
$1075

- 1MB Expandable to 128MB
- 256K Cache
- 3 VESA Local Bus or 3 PCI Slots
- 1.2 or 1.44 MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop Case w/Power Supply
- 101 Keyboard

586 Pentium 60MHz $945

MULTIMEDIA

CD ROMS

Mitsumi Double Speed • 250ms access time, 300kb transfer rate	$140
Panasonic Double Speed • 320ms access time, 300kb transfer rate	$140
Toshiba XM-3401 • SCSI w/200ms, 330kb transfer rate	$285
NEC 3Xi Triple Speed	$335

SOUND CARDS

Sound Blaster Pro Deluxe	$80
Sound Blaster 16	$95
Sound Blaster 16 SCSI-2	$150
Spectrum 16 Bit SCSI Sound Card	$110

CREATIVE LABS UPGRADE KITS

Discovery CD 16-Bit... **$320**

- Sound Blaster 16
- Speakers
- Double Speed CD-ROM
- CD Titles
- Microphone

BELMONT SYSTEMS INC. (415) 598-9058

(Belmont Computer Products)

FAX (415) 598-0186
Store Hours: M-F 9-6
Saturday 10-3

PRICE IS NOT ALL WE OFFER:

BEST QUALITY•STRONGEST SUPPORT STAFF•7 YEARS BUSINESS EXPERIENCE

$310
486SLC2-50MHz

- IBM 486SLC2 CPU w/16K Cache
- Motherboard manufactured in the USA by IBM
- 1MB RAM expandable to 16MB
- 1.2 or 1.44MB Floppy Drive
- 1.1 Interleave HD/FD Controller
- Tower or Desktop Case w/power supply
- 101 Enhanced Keyboard

486SLC2-50MHz VESA w/64K Cache ...**$360**
486SLC2-66MHz VESA w/64K Cache ...**$380**

486DX-40MHz w/ 128K Cache

w/AMD 486-40MHz CPU......**$395**
w/Cyrix CPU, Math Chip **$310**

- 1MB RAM Expandable to 32MB
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop Case
- 101 Enhanced Keyboard

$245
386-40MHz w/ 128K Cache

- 1MB expandable to 32MB on Board
- 128K Static Cache Memory
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Socket for 80387
- Tower or Desktop Case w/power supply
- 101 Enhanced Keyboard

$220
386SX-33MHz

- 1MB expandable to 16MB on Board
- Shadow RAM
- 1.2 or 1.44MB Floppy Drive
- 1:1 Interleave HD/FD Controller
- Tower or Desktop Case w/power supply
- 101 Enhanced Keyboard

- 212MB $170
- 250MB $185
- 340MB $200
- 420MB $215
- 540MB $275

Keyboards

Mitsumi 101 Key	$29
Keytronic 101 Key	35
Maxiswitch 101 Key	35

Floppy Drives

TEAC/Epson 1.2MB	$55
TEAC/Epson 1.44MB 3.5"	45

Hard Disks

212MB	180
250MB	195
340MB	215
420MB	225
540MB	290
Fujitsu 1.2GB SCSI II 8.5 MB	660

Modems

2400 Baud (Ext)	$50
Fax Modem (9600 Fax, 2400 Modem)	35
14,400 Modem, 14,400 Fax	70

Interface Cards

Mono Graphic Card	$15
VGA Card (16 Bit 800x600)	30
OAK SVGA (1024x768 512K)	40
Trident SVGA w/ 1MB RAM	60
Orchid Kelvin 64 VLB 1M/2M VLB/PCI	140/190
ATI Ultra Pro VLB 2MB	275
Diamond SpeedStar 24X	85
Diamond SpeedStar Pro VLB	105
Diamond Stealth 24 VLB	135
Diamond Stealth Pro 1M/2M	215/265
Diamond Viper w/2MB VESA/PCI	290
AT M I/O (2S, 1P, 1G)	15
IDE Card w/cable	15
Promise IDE VESA Cache Controller	110
Future Domain SCSI Card	75
Adaptec SCSI 1542C	175
Adaptec 2742 EISA SCSI	290
Adaptec 2842 VESA SCSI	240
Adaptec 2942 PCI SCSI	220

Monitors

14" Flat Screen	$85
Super VGA (1024x768) .39	190
Super VGA (1024x768) .28	215
Non-Interlaced SVGA Monitor	225
Impression 5 15" Monitor	320
Viewsonic 6	285
Viewsonic 14E	315
Viewsonic 15EX	395
Viewsonic 15	435
Viewsonic 17G	800
Viewsonic 17	950
Mag 17" OEM 1280x1024 .26	685
NEC 3V	475
Nanao 550i-w	1050
Sony 15SF	450

Motherboards

386SX-33MHz	$75
386-40MHz 128K Cache	105
486SX-25MHz w/Intel CPU 128K Cache	155
486SX-33MHz w/Intel CPU 128K Cache	175
486DX-33MHz w/Intel CPU 128K Cache	300
486DX2-50 w/Intel CPU 128K Cache	320
486DX2-66MHz w/Intel CPU 128K Cache	345
IBM 486SLC2-50MHz	170
IBM 486SLC2-66MHz VESA	225

Miscellaneous

387SX	$40
387-25/33/40	40
230W Power Supply	48
Logitech Mouse Man	50
Logi Trackman	75
Microsoft Serial/Bus	30/55
DFI Mouse (3 Button, Microsoft Comp.)	15
Mini Vertical Case w/PS	55
Mid Vertical Case w/PS	75
Full Vertical Case w/PS	95
Colorado 120MB Tape Backup	99
Colorado 250MB Tape Backup	155
Conner 250MB Tape	155
Colorado Tracker 250MB	335
16 Bit Ethernet Card	55
WD SMC Elite Ethernet 16 Bit	125
RAM DIP / SIPP / SIMM	Call

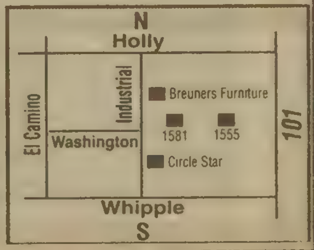
TERMS AND CONDITIONS:

- Company, Government PO's Welcome
- UPS Shipping Daily

All Prices and contents subject to change w/o notice.
All brand names are registered trademarks.
Co. Term on Credit approval.

Welcome to visit
our showroom!
Computers, Monitors and
Printers are now
on display!
Prices reflect Cash Discount.

Located in the
San Carlos Commerce
Center Office Park



PENTIUM 90 MHz
8 MB RAM
PCI
INTEL Motherboard
$1658
MOTHERBOARD/CPU
$1198

PENTIUM 66 MHz
8 MB RAM
PCI
INTEL Motherboard
$1418
MOTHERBOARD/CPU
$958

PENTIUM 66 MHz
8 MB RAM
VESA LOCAL BUS
$1308
MOTHERBOARD/CPU
$848

PENTIUM 60 MHz
8 MB RAM
PCI
INTEL Motherboard
$1268
MOTHERBOARD/CPU
$808

PENTIUM 60 MHz
8 MB RAM
VESA LOCAL BUS
$1168
MOTHERBOARD/CPU
$708

AMD Processor
VESA LOCAL BUS
486-66DX2
128K CACHE SYSTEM
$518
MOTHERBOARD/CPU
$338

INTEL Processor
VESA LOCAL BUS
486-66DX2
128K CACHE SYSTEM
$538
MOTHERBOARD/CPU
$358

VESA LOCAL BUS
486-66SLC
64K CACHE SYSTEM
$408
MOTHERBOARD/CPU
$228

AMD Processor
VESA LOCAL BUS
486-50DX2
128K CACHE SYSTEM
$488
MOTHERBOARD/CPU
$298

INTEL Processor
VESA LOCAL BUS
486-50DX2
128K CACHE SYSTEM
$498
MOTHERBOARD/CPU
$318

AMD Processor
VESA LOCAL BUS
486-40
128K CACHE SYSTEM
$448
MOTHERBOARD/CPU
$268

AMD Processor
VESA LOCAL BUS
486-33
128K CACHE SYSTEM
$418
MOTHERBOARD/CPU
$238

VESA LOCAL BUS
486-33
128K CACHE SYSTEM
$488
MOTHERBOARD/CPU
$318

VESA LOCAL BUS
486SX-33
128K CACHE SYSTEM
$358
MOTHERBOARD/CPU
$178

VESA LOCAL BUS
486SX-25
128K CACHE SYSTEM
$338
MOTHERBOARD/CPU
$158

386-40
128K CACHE SYSTEM
$288
MOTHERBOARD/CPU
$99

BASIC SYSTEM CONFIGURATION:

- 1MB RAM Expandable
- IDE 2FD/2HD Controller
- 101 Key Mitsumi Keyboard
- Teac 1.2 or 1.44 MB Floppy Drive
- 2 Serial, 1 Parallel, 1 Game Ports
- Mini-Desk Top or Tower Case
- Power Supply
- One Year Warranty

LIFETIME LABOR WARRANTY ON SYSTEM!

486-33 MHz
VLB MULTIMEDIA COMPLETE SYSTEM SVGA w/CD-ROM

PACKAGE INCLUDES:
- 486-33MHz w/128K Cache • AMD 80486-33 CPU
- 4 MB RAM • 210 MB Hard Drive
- Panasonic CD-ROM Model 562
- Media Magic Sound Card
- 1.2 and 1.44 MB Floppy Drive
- 14" SVGA 1024x768 .28mm Color Monitor
- SVGA Card w/1MB (Trident VLB)
- IDE Controller (2S/1P/1G)
- 101 Keyboard • 25W Speakers
- Microsoft Compatible Mouse

$1268

CALL FOR OTHER CONFIGURATIONS & OPTIONS

486 SYSTEM SPECIAL!
50MHz SLC ISA SYSTEM

PACKAGE INCLUDES:
- 4 MB RAM • 210 MB Hard Drive
- Teac 1.2 & 1.44 MB Floppy Drives
- Trident 1 MB SVGA Card
- 1024 x 768 .28 SVGA Monitor
- 2 Serial, I Parallel 1 Game Ports
- 101 Keyboard
- Mini-Tower or Mini Desktop Case
- Microsoft Compatible Mouse
- IDE 2FD/2HD Controller

$918

VIDEO CARDS

ATI Pro Turbo 2MB/4MB PCI/VLB	$389/589
ATI Ultra Pro VLB 2MB	269
ATI Ultra Pro 2MB ISA/PCI	269/269
ATI Ultra Plus 2MB DRAM PCI/VLB	209
ATI Wonder 1MB DRAM PCI or VLB	139
Diamond Stealth 24	138
Diamond Stealth 24 VLB (S3 Chip)	138
Diamond Stealth Pro (VRAM) 1/2MB	219/298
Diamond Stealth 64 2/4MB VLB or PCI	319/468
Diamond Stealth 32 VLB1/2MB	135/185
Diamond Viper SE PCI	285
Diamond Viper 2MB VRAM/PCI	325/325
Diamond Speedstar 1MB VLB	104
ORCHID Fahrenheit ISA/VLB	129/139
ORCHID Kelvin 1MB	155
GENOA VESA LOCAL BUS	95
GENOA PHANTOM 2MB	179
GENOA PHANTOM PCI 2MB	189
ET 4000 1024x768 NON-INT.	79
Trident VLB 1MB	68
Trident VGA (1024x768) 1MB	59
Accumos VGA 800x600/256K	28
Accumos 1024x768/512K	39
GENERIC Monochrome Graphics w/Printer Port	17

DRIVE CONTROLLERS

IDE Controller w/2S/1P/1G	19
IDE I/O VLB 2S/1P	25
IDE I/O VLB Hi-Speed Serial	49
Adaptec SCSI 1542C w/software	175/239
Adaptec SCSI 2742T EISA w/Floppy & Software (14 SCSI Devices Support)	365
Adaptec 2940 SCSI PCI	259
Adaptec VLB 2842VL w/Software	249
Trantor 8 Bit SCSI	45
Promise VLB Caching DC2120	125
QLogic Fast SCSI PCI w/Kit	299

I/O CARDS

AT I/O (2S 16550/1P/1G) Hi-Speed	$42
RS-232 card	17
AT-I/O (2S/1P/1G)	15
Printer Card	12
Game Card	12

KEYBOARDS

Keytronic 101	$37
Mitsumi 101	30
Acer 101 Keyboard (clicking)	35
Focus 9000 (129 Key) Programmable	55
MAXISWITCH 101 Keyboard	35
Black 101 Keyboard	39
QUTRONIX 101	15

MONITORS

IDEK MF8617 17" 1280X1024(Made in Japan)	$799
NANAO	
F550i 17"	$895
F550iw	979
T560i 17"	1475
F560iw 17"	1199
T660i 20"	1995
F760iw 21"	1915
F780iw 21" .26	3095
KFC 17" Flat Screen .26 Digital Cont	765
VIEWSONIC	
21" 1600x1280 .26	1789
20" 1600x1280 .28NI	1535
17" 1280x1024 .28NI	955
17G 17" 1280x1024 .28NI	825
15" 1280x1024 NI	449
15E	385
V6E Non-Int 14"	295
V4E 1024x768 VGA 14"	279
EYEQ 1024x768 VGA .28 (Full Screen)	219
SVGA 1024x768 .39	195
SVGA NI 1024x768 .28	229
VGA Mono	109
NEC Monitors	CALL
14" Flat Screen Mono (Amber or Paper White)	85
SONY	
15SF 15"	449
1730 17"	949
17SEI	975
GDM20SE 20"	1865
MAG MX 15F .28 1280x1024 NI	469
MAG MX 17F .26 1280x1024 NI	859
NOKIA	
449E (15") 80 Hz Refresh	499
447B (17")/TCO	955
447X	1099
445m (21") 1600x1280	2065
445x (21") 1600x1280	2665
ViewMagic 15" (On Screen Digital)	385

MODEMS & FAX/MODEMS

24/96 Fax Modem (Send/Receive)	$45
14400 Fax Modem V.42 Int/Ext	69/115
144/144 Voice/Fax/Modem	129
288/144 Modem/Fax	165
US Robotics Sportster 144/144 Fax/Modem	118

TAPE BACK-UP

COLORADO Tape Back-Up 250MB Ret/OEM	165/155
DC-2120 Tape Cartridge For Above	16
DC-2120 Tape Cartridge Formatted	18
CONNER 250MB Tape Back-Up (w/One Tape)	149
Trakker 250MB	325

DISK DRIVES

All HD Come with Mounting Bracket

TEAC 1.2 MB	$47
3.5" (1.44 MB) w/Frame	42
1.2, 1.44 MB Combo Drive	99
MAXTOR	
7345A 340 MB	219
7546A 540 MB	325
CONNER	
210MB	175
420MB	225
540MB	299
810 MB	479
1 GB MB	599
1 GB MB SCSI	675
IBM 250 MB	199
SEAGATE, CONNER, QUANTUM LARGER CAPACITY DRIVES	CALL

COMPATIBLE NETWORK CARDS

Ethernet 16 Bit	$59
10 BT Ethernet 16 Bit59	
Ethernet Combo 16 Bit	69
3 COM	
3C509 TP/Coax	119/119
3C509 Combo	139

U.P.S.

550 VA	$229

COMPUTER CASE

14" Baby AT Case W/ 200W P/S	$69
17" Baby AT Case W/200W P/S	89
Vertical Case 250W P/S	119
Medium Vertcal Case 250W P/S	95
Mini Vertical Case 200W P/S (UL Approv.)	69
Mini Vertical Case 200W P/S	49
Sleek Black Case	CALL

POINTING DEVICES

Logitech Trackman Combo	$75
Logitech Trackman Portable	69
Logitech Bus Mouseman	64
Logitech Mouseman Combo/OEM	49/41
First Mouse	30
Mouse (Serial 9 Pin)	9
Microsoft Mouse Bus/Ser (400dpi)	85/75
Microsoft Mouse Ser (OEM) Beige/Gray	35/25
Trackball	24

MISC.

Windows NT	$315
Windows For Workgroups (w/System purchase Only)	65
MS DOS 6.2 (w/ System only)	45
6/10/15/25' printer cable	3.50/6/10/20
Keyboard Extention cable	5
Monitor Extension cable	5
Keyboard Drawer/Under Table	27/18
Computer floor stand	7.95
Power Center	18
Printer switch box (AB/ABCD)	9.50/19
Printer switch box auto (AB/ABCD)	25/49
Power supply 220W	48
Memory Chips (DIPS/SIPPS/SIMMS)	CALL
Math Co-Processors	CALL
Disk Box	7.50
Power Strip	7
Keyboard Rest	3.50

PRINTERS

Panasonic KXP-1624 132 Column	$385
KXP-2023	219

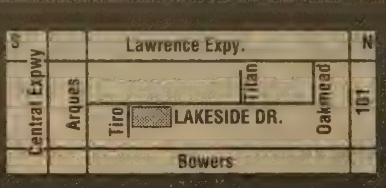
CALL FOR LATEST PRICES!

AROMA
Computer Systems
Always Ready to Offer More Assistance

470 LAKESIDE DR. Suite F
SUNNYVALE, CA 94086
Tel: (408) 736-4355
FAX: (408) 736-4356

M-F 9-7
Sat 10-4

Prices Subject To Change w/o Notice
Prices Good At Sunnyvale Store Only



MODESTO OFFICE:
3430 Tully Rd., Suite #2
Modesto, CA 95350
Tel: (209) 525-8080
FAX: (209) 525-8120

YOUR ONE STOP MULTIMEDIA SOURCE

WE MATCH OR BEAT ANY ADVERTISED CD SOFTWARE PRICE!

CD-ROM

PANASONIC 562 (MATSUSHITA) 320MS ACCESS TIME, 300KB TRANSFER RATE, 64K BUFFER, W/O CONTROLLER CARD	$135
NEC 3XI TRIPLE SPEED INTERNAL (CDR510) 190MS ACCESS TIME, 450KB/SEC	$345
TOSHIBA XM-3401 (SCSI) FASTEST CD-ROM, 200MS ACCESS TIME, 330KB TRANSFER, MULTI-SPIN, FREE CADDY	
INTERNAL DRIVE	$265
EXTERNAL DRIVE (ORIGINAL)	$395
AUDIO CABLES	$4.95
CADDY	$4.95

CREATIVE

CREATIVE LABS, INC.

MULTIMEDIA PRODUCTS

SOUND BLASTER AWE 32	$279
SOUND BLASTER PRO 16 BASIC (RETAIL PACKAGE)	99
SOUND BLASTER 16 MCD	139
SOUND BLASTER 16 SCSI	169
SOUND BLASTER 16 MCD/ASP	169
SOUND BLASTER 16 SCSI/ASP	199
SPEAKERS	
LABTEC CS-150	18
SPEAKER 25 WATT	39
SPEAKERS 80 WATT	69
JS SPEAKER 80 WATTS	79

CD TITLES SPECIAL SALE ENDS SEPTEMBER 15TH

KINGS QUEST VI & CRITICAL PATH	$25.99
WORLD CIRCUIT	$16.00
WOLF 3D MANIA	$8.99
AUTO REGISTRY 94	$12.99

MEDIA MAGIC

ISP-16 SOUND CARD, 16 BIT SOUND	$69
ISP-16 MULTIMEDIA PACKAGE	269

INCLUDES

SONY CD ROM

ISP-16 SOUND CARD

PLUS 4 CD TITLES

- KINGS QUEST V
- BATTLE CHESS
- DINOSAUR ENCYCLOPEDIA
- INTERACTIVE STORY TIME VOL I

CD-ROM SOFTWARE TITLES WITH HARDWARE PURCHASE PRICES

REFERENCE

20TH CENTURY ALAMANAC	$17
20TH CENTURY VIDEO-PEOPLE MPC	17
20TH CENTURY VIDEO-SPORTS MPC	17
AMERICAN BUSINESS PHONE BOOK 1993	15
AMERICAN BUS PHONE BOOK 1994	29
AMERICANS IN SPACE MPC	19
ARIS WIZARD MPC (MAC)	10
AUTO REGISTRY 1994	16
BETTER HOME HEALTHY COOKING MPC/MA	19
BODY WORKS VER. 3.0 MPC	39
BRING THE WORLD TO YOUR SENSES	8
CIA WORLD FACT BOOK DOS	15
COLOSSAL COOK BOOK	9.50
COMPLETE HOUSE MPC	17
COMPTON'S NEW CENTURY REF	23
COMPTON'S INTERACTIVE ENCYCLOPEDIA	24
DESERT STORM MPC (MAC)	15
DR'S BOOK OF HOME REMEDIES MPC	14
FAMILY DOCTOR (MAC)	16
GARDENING	7.95
GROLIERS ENCYCLOPEDIA 60 MPC	29
GUINNESS DISK OF RECORDS 1993 MPC	16
HAM RADIO V3.0	7.95
HIV AIDS RESOURCE GUIDE	7.95
JOKES & PRANKS DOS	7.95
LANGUAGE OF THE WORLD MPC	15
LEARNING FLY FISHING MPC	15
LIBRARY OF THE FUTURE 1ST DOS	30
MATHEMATICS LIBRARY MPC	12
MAVIS TEACHES TYPING MPC	13
MAYO CLINIC FAMILY HEALTH BOOK	15
MICROSOFT BOOKSHELF 1994 MPC	43
MICROSOFT CINEMANIA MPC	29
MICROSOFT ENCARTA 1994	55
NEWSWEEK INTERACTIVE VOL 1	18
NEWSWEEK INTERACTIVE VOL 2	18
OUR SOLAR SYSTEM	7.95
PARENTING	17
PHONE DISC 94 BUS & RES (R)	79
PHONE DISC 94 BUSINESS (R)	47
PHONE DISC 94 RESIDENTIAL	47
PHONE DISC REVERSE (5-CD) (R)	145
PRO PHONE: DIRECT PHONE MPC (R)	79
PRO PHONE: SELECT PHONE MPC (R)	135
REFERENCE LIBRARY BY STW DOS	14
RETURN TO THE MOON	18
SPACE SHUTTLE MPC	14
SPEECH CLIP LIBRARY	14
SPORTS ILLUSTRATED	17
TIME ALMANAC 1992 DOS	14
TIME TABLE OF HISTORY (BUS/POL)	13
TOTAL BASEBALL DOS (MAC)	15
US HISTORY DOS/MAC	14
USA WARS: CIVIL WAR DOS (MAC)	22
USA WARS: KOREA DOS (MAC)	22
USA WARS: WWII DOS (MAC)	22
USA WARS: VIETNAM DOS (MAC)	22
WORLD CUP USA (SOCCER) 1994	20

GAMES FOR CHILDREN

3-D DINOSAUR ENCY ADVENTURE	$15
ADVANCE SPELLING TRICKS MPC	19.50
ALPHABET BLOCKS MPC	19.50
ARTHUR'S TEACHER TROUBLE MPC	17
BASIC SPELLING TRICKS MPC	19.50
BEAUTY AND THE BEAST MPC	12
BEGINNING READING MPC	19.50
BUSY TOWN DOS (R)	29
BUTTERFLIES BY DISCIS MPC	12.50
CD FUN HOUSE DOS	16
CINDERELLA BY DISCIS MPC/MAC	13
DINOSAUR & SPACE ADV DOS	18
DINOSAUR BY DISCIS MPC	12.50
EARLY MATH MPC	19.50
FAMILY EDUCATION COLLECT DOS	16
FARM ANIMALS BY DISCIS MPC	12.50
FATTY BEAR FUN PACK	15
FATTY BEAR'S BIRTHDAY SURPRISE	15
FOREVER GROWING GARDEN	19
GOLDILOCK'S & THE 3 BEARS ENG	19
GUS GOES TO CYBERTOWN MPC/MAC	15
HARRY STORY DISC & COLOR BOOK	15
INTERACTIVE STORYTIME VOL1/2/3	14
JUST GRANDMA & ME	17
KID'S ZOO/UNDERSEA 2 CD TITLES	25
LENNY'S MUSIC TOONS V1.0	32
LITTLE MONSTER AT SCHOOL MPC	36
MACMILLAN DICT FOR CHILDREN	15
PETER & WOLF BY E BOOK MPC	12
PLAYING WITH LANGUAGE (ENGLISH)	17
PLAYING WITH LANGUAGE (FRENCH)	17
PLAYING WITH LANGUAGE (GERMAN)	17
PLAYING WITH LANGUAGE (JAPANESE)	17
PLAYING WITH LANGUAGE (SPANISH)	17
PUTT PUTT JOINS THE PARADE DOS	16
RICHARD SCARRY'S BEST NEIGHBORHOOD EVER	39
RICHARD SCARRY'S BUSIEST NEIGHBORHOOD EVER	39
SCARY POEMS BY DISCIS MPC/MAC	12.50
SING-A-LONG FOR CHILDREN	12.50
SLEEPING BEAUTY MPC	12
SPACE ADVENTURE DOS (R)	21
SPIDERS BY DISCIS MPC	12.50
THE PAPER BAG PRINCESS MPC/MAC	13.50
THE TALE OF BENJAMIN BUNNY MPC/MAC	12.50
TUNELAND MPC (R)	45
WHERE BY DISCIS MPC	12.50

ANIMALS & NATURE

AUDOBON'S BIRDS MPC (MAC)	$14
AUDOBON'S MAMMALS MPC (MAC)	14
DICT OF THE LIVING WORLD MPC	16
DINOSAUR ENCYCLOPEDIA	14
DINOSAUR SAFARI	19
MICROSOFT DINOSAURS MPC	29
NAT'L GEO MAMMALS DOS	16
OCEAN'S BELOW MPC	19
SAN DIEGO ZOO/ANIMALS MPC	12
WHALE OF TALE MPC	49

GAMES

AEGIS GUARDIAN OF THE FLEET DOS	$49
BATTLE CHESS ENHANCE MPC	19
BEYOND THE WALL OF STARS	16
BLUE FORCE	25
CARMEN SAN DIEGO DELUXE CD	18
CHALLENGE PACK-GAME PACK III	20
C.H.A.O.S. CONTINUUM	15
CHESS MASTER 3000 MPC	14
CHESS MASTER 4000 TURBO MPC	16
COMANCHE MAXIMUM OVER KILL DOS	59
CONAN THE CIMMERIAN	17
CRITICAL PATH DOS	19/29
CURSE OF ENCHANHTIA DOS	32.50
CYBER RACE	15
DARKSEED	19
DAY OF THE TENTACLE	19
DEATHSTAR ARCADE BATTLES	7.95
DELUXE GAME PACK	18
DRACULA UNLEASHED DOS/(OEM)	49/25
DRAGONSPERE DOS	39
DUNE DOS	23
F15 STRIKE EAGLE III (GAME)	12
FAMILY CHOICE/BRITANNICA DOS	15
FLIGHT SIM TOOLKIT DOS	59
GABRIEL KNIGHT	19/41
GAME JAMBOREE	7.95
GEEKWAD	25
GUNSHIP 2000	19
HELL CAB VER 1.1	44
HUGO'S HOUSE OF HORRORS	7.95
INCA DOS	19
INDIANA JONES	19
IRON HELIX MPC	19
JONES IN FAST LANE MPC	13
JOURNEYMAN PROJECT MPC (R)	45
JUTLAND DOS	23
KING'S QUEST V DOS	12
KING'S QUEST VI DOS	19
LANDS OF LORE MPC	39
LOOM FROM LUCAS FILM DOS	12
LORD OF THE RINGS DOS	25
MAD DOG MCCREE	19
MAD DOG MACREE II (THE LOST GOLD) DOS	39
MAGIC DEATH VIRTUAL MURDER 2	14
MANTIS EXPERIMENTAL FIGHTER	12
MAN ENOUGH	27
MARIO IS MISSING DELUXE MPC	14
MEGA RACE	19
MEGA ROCK RAP'N'ROLL V1.0	47
MICROCOSM DOS	18.50
MICROSOFT GOLF MPC	23
MICROPROSE COLL DOS/MAC	15
MIXED UP MOTHER GOOSE	9.95
MONKEY ISLAND DOS	12
MYST MPC (R)	47
OUTPOST BY SIEERA MPC	45.50
PROTOSTAR	25
QUANTUMGATE	19
REBEL ASSAULT	47
RED STORM RISING & F-1117A STEALTH FIGHTER	24
RETURN TO ZORK	19
RING WORLD	25
SECRET WEAPONS/LUFTWAFFE DOS	14
SIMM CITY 2000	31
SPACE QUEST IV BY SIERRA DOS	13
SPIRIT OF EXCALIBUR	17
SPORT'S BEST (3 IN 1) DOS	14
STAR TRACKS 25TH ANNIVERSARY	25
STAR WARS CHESS MPC	16
STELLAR 7 DOS	13
THE 7TH GUEST MPC	19
THE LAWN MOWER MAN MPC (R)	41
THE LEGEND OF KYNRANDIA MPC	19
THE TERMINATOR RAMPAGE DOS	48.50
WACKY FUNSTER	25
WHO KILLED SAM RUPERT?	16
WHO SHOT JOHNNY ROCK?	35
WILLY BEAMISH-THE ADVENTURE	13
WOLF 3-D MANIA	15
WORLD CIRCUIT	25
WRATH OF THE GODS MPC	48.50

ARTS & MUSIC

A CHRISTMAS CAROL	$15
A HARD DAYS NIGHT (BEATLES)	18
MUSICAL INSTRUMENT OF SYMPHONY ORCHESTRA	15
MIDI MUSIC SHOP PROFESSIONAL	15
PINACOTHECA PC MULTIMEDIA MPC	13
RENAISSANCE MASTER I MPC	16
RENAISSANCE MASTER II MPC	20
SFX-300 SOUND EFFECTS	14
SOUND LIBRARY MPC	9.50
SURVEY OF WESTERN ART MPC	18

SHAREWARE

BIBLES AND RELIGION	$7.95
CICA MS WINDOWS '94	15
CLIPART GOLIATH	7.95
COMPLETE BOOKSHOP	7.95
COLOSSAL COOKBOOK	7.95
DICTIONARIES AND LANGUAGES	7.95
DR. FUNPACK	9.00
DR. GAMES DOS	9.00
DR. MUSIC DOS	9.00
DR. SHAREWARE DOS	9.00
DR. WINDOWS MPC	9.00
ENCYCLOPEDIA OF SOUND	7.95
ENCYCLOPEDIA OF SOUND/VOL2	7.95
FONTS EXPERT	11

$7.95 CD Titles Special...At Store

GAMES EXPERT VOL 1 VER 1.0	9.95
GAMES PLATINUM VOL1 VER 1.0	9.95
HOBBES OS/2 CDROM	14
MULTIMEDIA MANIA	7.95
PC-SIG 11TH EDITION DOS	10
PC-SIG 13TH EDITION DOS	17
QUICK TOONS DOS	19
SO MUCH SHAREWARE II DOS	13
SO MUCH SHAREWARE IV	17
SOUND SENSATIONS	7.95
SUPERTOUNE DOS	19
TECHNO TOOLS	7.95
THE BEST OF 101 GAMES	12
TOO MANY TYPEFONTS	7.95
WIN PLATINUM VOL 1 VER 1.0	9.95
WIN SUPERIOR MPC	9.95
WINDOWSWARS	7.95
WINDOWS EXPERT VOL. 1	9.95

BUSINESS

AUTHORWARE STAR MPC	$30
INT'L BUS & ECON ATLAS DOS	13
MACROMEDIA ACTION MPC	19
MICROSOFT WORKS MPC	39
PERSONAL FINANCE	7.95
Q&A SYMANTEC DOS 4.0	24

DESKTOP PUBLISHING & IMAGES

ARIS JETS & PROP MPC (MAC)	$15
ARIS WILD PLACE DOS (MAC)	9
ARIS WORLD VIEW DOS (MAC)	9
HALO DESKTOP IMAGER MPC	17
KODAK PHOTO CD ACCESS MPC	10
OCEAN DIGITAL IMAGERY VI MPC	17

ATLAS & TRAVEL

ADVENTURE MPC	$16
GREAT CITIES-VOL 1 & 2 DOS	14
NATIONAL PARKS DOS	16
TRAVEL COMPANION-TOOLWORKS	19
US ATLAS V4.0 BY STW MPC	13
USA NATIONAL PARKS MPC/MAC	18
WORLD ATLAS V4.0 MPC	13
WORLD TRAVELER VOL 1	7.95

CALL FOR MAC TITLES

ADULT TITLES IN STOCK

*CALL FOR MORE INFORMATION ON SOFTWARE TITLE AVAILABILITY & PRICING

AROMA

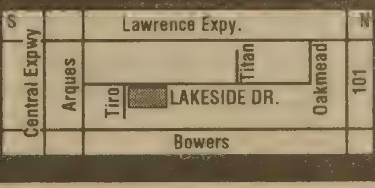
Computer Systems

Always Ready to Offer More Assistance

470 LAKESIDE DR. Suite F
SUNNYVALE, CA 94086
Tel: (408) 736-4355
FAX: (408) 736-4356

M-F 9-7
Sat 10-4

Prices Subject To Change w/o Notice
Prices Good At Sunnyvale Store Only



MODESTO OFFICE:
3430 Tully Rd., Suite #21
Modesto, CA 95350
Tel: (209) 525-8080
FAX: (209) 525-8120

Intel Pentium 60/66/90 MHz 540MB 8MB PCI Local Bus

- Intel Pentium 64-bit 60/66/90 MHz Processor
- Intel PCI Local Bus Motherboard w/256KB Write back Cache
- 8MB 72pin Simm 70ns (up to 128MB)
- 540MB 10ms IDE HD
- Orchid Kelvin 64 64-bit Graphic Accelerator w/2MB RAM 1280x1024 Max. Resolution 16.8 Million Max. Color Display
- TEAC 1.44MB Floppy Drive
- KeyTronic 101 Enhanced Keyboard
- Microsoft Mouse w/ Pad
- On board PCI IDE Controller 4HD/2FD IDE Controller
- On board 2 Serials (16550 UART) & 1 Parallel
- Full Tower Case w/ 250 Watts Power Supply w/Dual Cooling Fans & CPU Fan
- Flash AMIBIOS & Dallas CMOS

intel inside pentium PROCESSOR

$ 1699 / 1799 / 2099
60MHz 66MHz 90MHz
(Monitor not included)

486-25/33/40/66/75/100 32-Bit VLB 4MB 420MB HD

- *486-33SX/33DX/40DX/50DX2/66DX2/100DX4
- *VLB 256KB Cache Memory Motherboard
- *4MB Simm 70ns (up to 32MB)
- *420MB 12ms IDE Hard Drive
- *14" SVGA Non-Interlace 1024x768 0.28mmdp SVGA Color Monitor
- *Orchid Fahrenheit or Diamond Stealth VLB W/1MB 1280x1024 & 16.8M True Color
- *TEAC 1.44MB Floppy Drive
- *Mitsumi 101 Enhanced Keyboard
- *Microsoft Compatible Mouse w/ Pad
- *VESA Local Bus 2HD/2FD IDE Controller w/ 2 Serials, 1 Parallel, & 1 Game Ports
- *Med Tower Case w/230 Watts Power Supply
- *CPU Cooling fan for 50,66,100 MHz system

$ 1099 /1199 /1229 /1279 /1299 /1649
SX33 DX33 DX40 DX2-50 DX2-66 DX4-100

IBM 486SLC2 50/66/75BL3 32-Bit VLB 4MB 250MB HD

- *IBM 486SLC2 50/66/75BL3 MHz
- *ALARIS 486SLC2/BL3 VLB Motherboard w/64KB Cache Memory (up to 128 KB) OR W/256KB Cache Memory(for 75BL3) & Math. (floating point) Coprocessor Manufactured by IBM in the USA
- *4MB Simm 70ns (up to 16MB)
- *212MB 12ms IDE Hard Drive
- *14" 1024x768 0.28dp SVGA Non-Interlace SVGA Color monitor
- *Cirrus Logic VLB Graphic Accelerator Card w/1MB & 16M Color
- *Mitsumi 1.44MB Floppy Drive
- *Mitsumi 101 Enhanced Keyboard
- *Microsoft Compatible Mouse w/Pad
- *VESA Local Bus 2HD/2FD IDE Controller w/2 Serials, 1 Parallel, 1 Game Ports
- *Mini Tower Case w/230 Watts Power Supply

IBM

$ 999 / 1039 / 1169
SLC2-50 SLC2-66 BL3-75

486 33/66/100 MHz 540MB SCSI 8MB PCI

- *486-33DX/66DX2/100DX4
- *ASUS PCI VESA Local Bus ISA 256KB Cache Memory Motherboard
- *8MB Simm 72pin 70ns (up to 128MB)
- *540MB 12ms SCSI II Hard Drive
- *14" SVGA 1024x768 Non-interlace 0.28mmdp SVGA Color Monitor
- *Diamond Stealth 32 PCI w/2MB
- *Teac 1.44MB Floppy Drive
- *Keytronic 101 Enhanced Keyboard
- *Microsoft Mouse w/ Pad
- *2 Serials, 1 Parallel, & 1 Game Ports
- *NCR PCI Bus Mastering SCSI II Controller
- *Med Tower Case w/230 Watts Power Supply
- *CPU Cooling fan for 50,66 MHz system

$ 1649 / 1719 / 2099
DX33 DX2-66 DX4-100

Monitors

Impression 3 Plus 14" 1024x768 .28 72Hz	$279
Impression 7 17" 1280 .26 (MAG,DX17 OEM)	$659
KFC 14" SVGA 1024x768 .28 I/NI	$225/245
KFC 15" SVGA Color Ana/Digi. 1280 .28 NI	$325/379
KFC 17" SVGA Ana/Digi 1280 .26 NI	$699/729
Samsung 15GL 1280 .28/17GL 1280 .26	$369/769
ViewSonic **SAMSUNG ELECTRONICS**	
ViewSonic 4E/6E(NI) 1024x768 .28	$265/285
ViewSonic 14E 1024x768 0.28 72Hz NI MPR II	$329
ViewSonic 15E/15 1280x1024 72Hz NI MPR II	$379/$435
ViewSonic 17G/17 76Hz	$799/899
ViewSonic 20/21 1600x1280 Flat	$1449/1749
SONY	
SONY 15SF 1280x1024 0.28	$449
SONY 17" GDM-SE1 1600x1280 .25	$959
SONY 20" GDM-SE .30	$1829
NEC	
NEC 15" 3V	$479
NEC 3FGe/4FGe Flat 60/72	$569/629
NEC 17" 5FGe 1024/5FGp 1280 Flat	$989/1099
NEC 21" 6FGp 1280x1600 Flat	$1999
MAG	
MAG 15" MX15F/DX15 1280x1024 0.28 Flat	$469/$389
MAG 17" MX17FG/DX17 1280x1024 0.26 Flat	$819/$689
MAG MX-21F 1600x1280 .28 Flat	$1799
NOKIA	
Nokia 449E 15" 1024	$499
Nokia 447B/447X 17" Trintron .25	$879/999
Nokia 21" 1280 445M/ 1600 445X 21"	$1949/$2599

Video Cards

Trident 9000 ISA 1024x768 w/512KB	$39
Trident 8900D ISA 1024x768 w/1MB	$59
Cirrus Logic ISA Accerator w/1MB	$65
Cirrus Logic VLB Accerator w/1MB	$85
Genoa 8500VL 24-Bit Acc.	$95
Number 9 GXe 64 2MB PCI/VLB	$249
Matrox PCI/2 Plus 1600X1200	$539
ORCHID	
Orchid Fahrenheit VLB,ISA 1MB/2MB DRAM	$145/199
Orchid Celcius VLB 1MB/2MB VRAM	$149/199
Orchid Kelvin 64 VLB,PCI 1MB/2MB DRAM	$159/$199
DIAMOND	
Diamond SpeedStar Pro VLB,ISA 1MB	$99
Diamond SpeedStar 64 PCI,ISA w/1MB	$159
Diamond Stealth 24 VLB,ISA w/1MB DRAM	$139
Diamond Stealth 32 VLB,PCI 1MB/2MB DRAM	$159/205
Diamond Stealth 64 VLB,PCI 1MB/2MB VRAM	$329/479
Diamond Viper VLB,PCI w/2MB VRAM	$299
Diamond Viper VLB,PCI 2MB/4MB VRAM	$539/779
ATi	
ATI Ultra Graphic Pro VLB,PCI 2MB DRAM/VRA	$179/245
ATI Ultra Graphic Turbo PCI,VLB 2MB/4MB VR	$359/539
SPiDER. Graphics, Inc.	
Spider Widow Plus 1MB/2MB	$179/249
Spider 64VLB/PCI 2MB/4MB	$199/299
Spider 32VLB Plus 1MB/2MB	$109/159
Hercules	
Hercules Dynamite Pro VLB 1MB/2MB DRAM	$169/219
Hercules Dynamite Pro PCI 2MB	$240

Multimedia

CREATIVE CREATIVE LABS, INC.

SoundBlaster 16 Basic & Panasonic 563 Int. CD-ROM (\$249)
- *Creative Lab SoundBlaster 16 Basic
- *Panasonic 563 Double Speed Int. CD-ROM (320ms,300KB/s)
- *Mini Speaker

SoundBlaster AWE 32 & Mitsumi Double Speed CD-ROM (\$449)
- *Creative Lab SoundBlaster AWE 32 w/Wave Table
- *Mitsumi Double Speed Int. CD-ROM (250ms,300KB/s)
- *Mini Speaker

SoundBlaster 16 SCSI & Toshiba 3401 Int. CD-ROM (\$439)
- *Creative Lab SoundBlaster 16 SCSI-2 Sound Card
- *Toshiba 3401 Double Speed Int. SCSI CD-ROM
- *Mini Speaker

SoundBlaster 16 SCSI & NEC CDR-510 3X CD-ROM (\$499)
- *Creative Lab SoundBlaster 16 SCSI-2 Sound Card
- *NEC CDR-510 3X SCSI CD-ROM (195ms,450KB/s)
- *Mini Speaker

Creative Lab DigitalEdge CD 3X MultiMedia Kit (\$649)

Creative Lab GameBlaster CD 16 MultiMedia Kit (\$369)

Creative Lab Discovery CD 16 MultiMedia Kit (\$319)

MEDIA VISION

Media Vision MV-3000 Super Deluxe Multimedia Kit (\$389)
- *Media Vision 16-bit Sound Card w/SCSI Controller
- *Internal Double Speed SCSI CD-ROM,15 CD Title & Speaker

*Mitsumi Double Speed CDROM	$139
*Panasonic 562/563 Double Speed	$139
*Toshiba 3401/4101 SCSI DS	$279/199
*NEC 3Xi Internal SCSI/OEM	$449/339
*NEC 3Xp/3Xe SCSI	$399/499
*NEC 4XPro External SCSI	$849
*Plextor 3028 Internal SCSI DS	$259
*Plextor Internal SCSI 4X Speed	$519

Network Products

NOVELL.	
*NetWare V3.12 (5/10/25)	$599/1349/2049
*NetWare V3.12 (50/100/250)	$2689/3949/6899
*NetWare V4.02 (5/10/25)	$799/1749/2569
*NetWare V4.02 (50/100/250)	$3549/5199/8999
SMC	
*SMC Elite Ultra 16-bit Combo (Single/6 Pak/24 Pak)	$119/619/2299
intel.	
*Intel 16 EtherExpress Coax/10BT (Single/6 Pak/20 Pak)	$105/495/1749
3Com	
*EtherLink III 3C509 BNC/10BT	$125
*EtherLink III 3C509 Combo	$139
ARTISOFT	
*Lantastic 6.0 (1/5/10/25/)	$79/339/609/1199
*Lantastic 6.0 (50/100)	$1949/3299
*Simply Lantastic Starter Kit	$199

Printers & Scanner

HEWLETT PACKARD	
*DeskJet 520/560C	$289/559
*LaserJet 4L/4ML	$649/999
*LaserJet 4P/4MP	$949/1349
*LaserJet 4+/4M+	$1399/1999
*ScanJet IIcx/IIp	$919/489
Canon	
*BJC-600 Color 360dpi	$559~
*BJ200E/230 360dpi	$269/369~
(~after $30 rebate, limited time)	
OKIDATA	
*OL400e 300dpi/OL410e 600dpi	$499/659
*OL410e/PS 600dpi Post Script	$899
MICROTEK	
*ScanMaker 35T 1800dpi PC/Mac	$1399/1449
*ScanMaker IISP CLR PC/Mac	$789/779
*ScanMaker IIG GS PC/Mac	$489/485
*Scooter ColorHand Held	$249
*ScanMaker II XE PC/Mac	$899/879
*DIGITAL Laser 1152 PS 300dpi	$669

Mass Storage

COLORADO MEMORY SYSTEMS INC.	
*Jumbo 250MB Int./Trakker 250 Ext.	$165/319
*Colorado 700 DJ25 Int 9.3MB/s	$call
*PowerTape PT 1GB/2GB SCSI Int.	$619/939
*PowerDAT 6000 4GB Int/Ext	$11491345
CONNER	
*Tape.Stor 250MB Int/Ext	$148/299
*Viper 525MB SCSI Tape Backup	$449
*Python DAT 2GB/4GB SCSI	$879/1029
HEWLETT PACKARD	
*JetStore DAT Tape 2000i/5000i	$1049/1189
*JetStore DAT Tape 6000i	$1649
IBM	
*IBM 650MB Rewritable Optical Internal Drive SCSI 5.25" Full Height	$699

Call For Current Hard Drive Price

Maxtor Seagate CONNER Caviar

Sound Card & Modem

*SoundBlaster Pro/16/16MCD	$79/96/109
*SoundBlaster 16 SCSI/SCSI w/ASP	$159/189
*SoundBlaster AWE 32 MCD	$279
*ProAudio 16 Basic/Spectrum/Studio	$75/95/119
*Orchid SoundWave 32 w/Wave Tabl	$179
*Sigma Designs ReelMagic V/A	$359
*Adaptec AMM-1570 Audio/SCSI	$319
*USRobotics 14.4 FaxModem Int/Ext	$115/135
*USRobotics 28.8 FaxModem Int/Ext	$219/239
*USRobotics 14.4 PCMCIA	$189
*Practical Peripherals 14.4 Fax Int/Ext	$115/139
*Supra 14.4 FaxModem Int/Ext	$85/119
*Supra 28.8 FaxModem Int/Ext	$229/249
*Zoltrix 14.4K FaxModem Int/Ext	$75/109
*Zoltrix 28.8K FaxModem Int.	$159
*Zoltrix 14.4K Voice/Fax/Data Int	$109
*DSI SoftModem 19.2K FaxModem Int.	$99
*DSI SoftModem 19.2 Voice/Fax/Data	$119
*DSI Scout 28.8K Internal FaxModem	$189
*DSI Scout Classic 14.4K Ext FaxM	$109
*National Tyin Voice/Fax/Data Modem	$99
*Spectrum Envoy 14.4K Internal best Voice/Fax/Data DSP Technology upgradable to 28.8K for Home office	$279

AiM Computers

1741-C Clayton Road, Concord,CA 94520
TEL: (510) 687-2822
FAX: (510) 687-5276
Internet: aimcomp@ccnet.com
Hours: Mon-Sat 10-6:30

VISA MasterCard

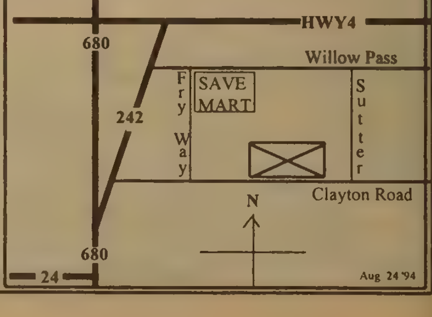
FREE
Prodigy & Internet
for System Purchases

AiM Quality Guarantee

*** Lifetime Labor & 1 Year Parts**
*** 72 Hours Burn-In**

Prices subject to change without notice
Not responsible for typographical errors
Trademarks are registered by the respective companies
Contents subject to change without notice
** Limited warranty, see store for detail
# w/ System purchase

Extended Warranty Service Available
On-Site Service Repair Available
Delivery & Setup Available
Financing & Leasing Available



YOUR ONE STOP SHOP IN SOUTH SAN FRANCISCO

SALES & SERVICE CENTER

Novell Authorized Reseller™

Panasonic Office Automation
Authorized Service Center

SCO AUTHORIZED RESELLER

VOTED 10 BEST OF THE BAY AREA

HEWLETT PACKARD
Authorized Service Center & Reseller

SMC
Authorized Reseller

SYSTEM BOARDS

AMI	
Super Voyager II 486-33 256K VLB	635
Super Voyager II 486DX2-66 256K VLB	835
Enterprise IV 486-33 256K EISA VLB	725
Enterprise IV 486DX2-66 256K EISA VLB	925
Intel P5 Pentium 90MHz PCI 256K	**Call**
AIR, Asus, Diamond, Intel	**Call**

HARD DRIVES

Conner	
Conner CFS-210A 212MB 14ms IDE	209
Conner CFS-420A 420MB 14ms IDE	269
Conner CFS-540A 540MB 12ms 256K IDE	349
Conner CFS-810A 810MB 12ms 256K IDE	Call
Hewlett Packard	Call
Micropolis	Call
Maxtor	
7117 170 MB 14ms IDE	189
7245A 245MB 15ms IDE	239
7345A 345MB 14ms IDE	369
MXT-7546A 546MB 12ms 256K IDE	359
Quantum	
LPS540AT 540MB 12ms 128K IDE	359
Empire 1.08GB 9ms 512K Fast SCSI-III	679
PD1225S 1.2GB 10ms 512K Fast SCSI-II	899
PD1800S 1.8GB 10ms 512K Fast SCSI-II	1039
Seagate	
ST31200N 1.0GB 9ms 256K Fast SCSI-II	749
ST12400N 2.1GB 9ms 256K Fast SCSI-II	1375
Barracuda 1.6GB 8ms 7200RPM Fast SCSI-II	1449
Barracuda 2.1GB 8ms 7200RPM Fast SCSI-II	1749

POWER SUPPLIES

Kingspao	
200W-250W, XT-AT-PS2 Size	59
250W AT Size Power Supply for Desktop	59
250W for Full Tower Case	69
PC Power Cooling	
300W for Full Tower Case	185

SCANNERS

Umax UC630LE 600dpi 24 Bit Flatbed Color	795

MONITORS

Addonics	
14" 1024x768 .39mm VGA-SVGA	228
14" 1024x768 .28mm VGA-SVGA	258
14" 1024x768 .28mm Non-Interlace SVGA	295
Nanao	
15" F340iw 1024x768 .28mm NI 76Hz	599
17" F550i 1280x1024 .28mm NI 75Hz	925
17" F550iw 1280x768 .28mm NI	965
17" T560i 1280x1024 .25mm NI Trinitron	1470
21" F760iw 1280x1024 .31mm NI	1999
NEC	
15" 4FGe 1024x768 .28mm 76Hz NI	649
17" 5FGp 1280x768 .28mm NI	1099
21" 6FGp 1280x768 .31mm NI	2020

MULTIMEDIA

NEC Internal TripleSpin 450K/sec CD ROM	359
Sony Double Speed CD ROM w/Adapter Kit	149
Toshiba CD-ROM 200ms 330KB/Sec Int./Ext.	284
Pro Audio Spectrum 16 Sound Card	119
Sound Blaster Pro 16 MCD Sound Card	149

MODEMS

GVC	
14.4K V.32bis, 42bis with Fax	119
14.4K V.32bis, 42bis with Fax External	139
Intel SatisFAXtion	
Model 200 14.4K/2400 with Fax	185
Model 300 9600/14.4 with Fax	235
Model 400 14.4K with Fax	275
Model 400e 96/14.4K with Fax External	329
14.4EX External Modem w/16MHz Processor	345
Megahertz, Practical Peripherals, US Robotics	**Call**

TAPE BACKUPS

Colorado	
250MB Internal Tape Backup	165
250MB Ext. Parallel Port Tape Backup	329
ExaByte SCSI Tape Backup	**Call**

INPUT DEVICES

Keytronic 101 Keys Enhanced Keyboard	45
Mitsumi 101 Keys Enhanced Keyboard	40
Logitech 400dpi Serial Mouse Man	35
Microsoft 400dpi Serial Mouse	35
Summa Skatch III 12x12 4 or 16 Button Digitizer	279

VIDEO ADAPTERS

ATI	
Ultra Pro VLB 1MB DRAM	149
Ultra Pro VLB 2MB VRAM	269
Ultra Pro PCI/VLB 1MB DRAM	149
Ultra Pro PCI/VLB 2MB VRAM	269
Ultra Pro Turbo 64 PCI/VLB 1MB DRAM	175
Ultra Pro Turbo 64 PCI/VLB 2MB VRAM	375
Ultra Pro Turbo 64 PCI/VLB 4MB RAM	579
Diamond	
SpeedStar Pro ISA/VLB 1MB RAM	129/129
Diamond Stealth PCI 1MB/2MB	175/229
Viper VLB & PCI 2MB VRAM	Call
Orchid	
Fahrenheit 1280 VLB 1MB	149
Celsius VLB 1MB/2MB	149/199
Kelvin 64 1MB VLB/PCI	169/169
#9 Number NINE	**Call**
Matrox	**Call**

CONTROLLERS & ADAPTERS

1522 16 Bit SCSI	109
1542CF 16 Bit Fast SCSI	209
2742 EISA SCSI 32 Bit Kit	279
2842VL VESA RISC SCSI II	269
2940 PCI SCSI II Kit hard drive support	259
2942 PCI SCSI II Kit hard & floppy support	299
Kouwell	
AT I/O (2S,1P,1G) w. 16550 High-Speed	59
IDE w. AT I/O (2S,1P,1G) w. 16550 High-Speed	69
IDE w. AT I/O (2S,1P,1G) VLBw. 16550 Chip	79
STB 2 16550 Serial & 1 Bi-directional Parallel	55
BusLogic, QLogic	**Call**

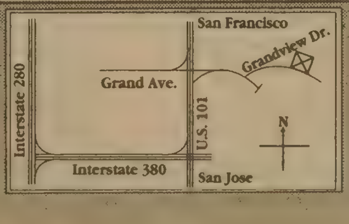
NETWORKING

SMC	
Elite Ultra 16 TP or Coax Ethernet card	109
Elite Ultra 16 Combo Ethernet card	149
3COM	**Call**
Intel	**Call**
Novell-Netware Products & Network Adapters	**Call**

NO SURCHARGE ON CREDIT CARDS

COMET MICRO SYSTEM

1301 GRANDVIEW DRIVE SOUTH SAN FRANCISCO, CA 94080
PHONE: (415) 615-9123, FAX: (415) 615-0287
VOTED ONE OF THE BEST TEN COMPUTER STORES IN THE BAY AREA!



TERMS & CONDITIONS

Prices subject to change w/o notice. Not responsible for typos/errors. No surcharge on credit cards on advertised prices only. Please call for items not listed. One year warranty on all parts. Three years warranty on labor. Dealer & Quantity pricing available.

MasterCard VISA

LOWEST PRICES
SAME DAY
SHIPPING

AMT INTERNATIONAL

2393 QUME DRIVE, SAN JOSE, CA 95131
TEL (408) 383-9044 FAX (408) 383-9047, 944-9801

LOWEST PRICES
SAME DAY
SHIPPING

QUANTITY PRICING FOR DEALERS & VARS, PLEASE CALL!!

INTEL CPU CHIPS

• PENTIUM 60/66/90 MHz	$450/595/690
• 486DX-4 100 MHz	629
• 80486DX-33 MHz	229
• 80486DX-50 MHz	289
• 80486DX2-50 MHz	$239
• 80486DX2-66 MHz	259
• 80486SX-25 MHz	69
• 80486SX-33 MHz	89

A.M.D. CPU CHIPS

• 80486DX-40 MHz	$169
• 80486-2-50 MHz	208
• 80486-2-66 MHz	229

MEMORY UPGRADES - DUE TO THE RAPIDLY CHANGING PRICES CALL FOR THE LATEST PRICES!

SIMMS

IBM TYPE

1x9-60 3 Chip	$39
1x9-70 3 Chip	38
1x9-80 3 Chip	39
1x9-80/70/60 9 chip	39/40/41
1x9-10	32
4x8-70/80	119
4x9-70	135
4x9-80	128
4x9-60	136

MAC TYPE

1x8-100 8 Chip	$36
1x8-80 2 Chip	33
1x8-70 2 Chip	34
1x8-80/70 8 Chip	35
2x8-80/70	89
4x8-80/70	118/119
16x8-80/70	CALL
Mac IIfx 4/16 MB Kit	CALL
256K VRAM	CALL
512K VRAM	CALL
16/32/64/128MB Kits for Quadra 700/900 & Mac IIfx, ci	CALL
NEW 72 PIN SIMM for MAC LCII & CENTRIS	CALL

72 PIN SIMMS (36 BIT)

256Kx36-80/70	$49/52
512Kx36-80	89
512Kx36-70	92
1x36-70	144
1x36-60	149
2x36-80/70/60	269/299/305
4x36-80/70	540
8x36-70 NEW	1140

32 BIT SIMMS ALSO AVAILABLE

DRAMS

DRAMS

256x1-80	$2.00
256x1-100	2.00
256x1-120	2.00
256x4-70/80	4.99
64x4-80/100	3.00
1x4-80 DIPP	60
1MBx1-70	5.99
1MBx1-80/60	5.99
SOJ	CALL

ZIPPS

64x4-10/12 Page, 18pin	$6.00
256x4-80/70 Page, 20pin	7
256x4 Video Page 28pin TC524256Z-70	8
256x4 Video 28pin TC524256Z-60	8.50
1x4-80/70 Page 20pin ZIPP	24
1x4-80/70 Page 20pin DIPP	35

CACHE MEMORY

32Kx8-20	$3.99
32Kx8-15/12	4.99
64x4-20	5
64x4-15	5.50
8Kx8-20	2.75
8Kx8-15	3
16Kx4-20	2.75
16Kx4-15	3.50
64x1-20	6.75
64x1-15	8.50
128x8-20	25
128x8-25	24

MATH CO's

INTEL/CYRIX/ULSI

287-10	$29
8087-1/2/3	89/69/59
287XL Intel Tube	49
387SL Intel Tube	49
387SX-26/20/33	49
387SX-25 Cyrix	39
387SX-33 ULSI	34
387DX-20 Intel Tube	20
387DX-25 Intel Tube	28
387DX-33 Intel Tube	45
387DX-40 Cyrix/IIT	29
4167-25/33 Weitek	200/375

CALL FOR PRICING ON IIT, ULSI & WEITEK

LASER PRINTER MEMORY

Price includes Memory, Board & Installation Instructions

IBM LASER

4019/4019E 1/2/3.5 MB	$89/129/179
4029 (All Model) 4 MB	179

EPSON LASER

6000-2/4MB	$145/189
7000-1/2/3 MB	125/149/189
Action LaserII-2/3/5 MB	159/205/299

HP LASER

HPII/IID 2/4 MB Board	$135/199
HP 4/4M 4/8MB	149/245
HP IIP,IIP+,III,IIID,IIIP 1/2/3/4	75/135/155/220
IIsi 4/8 MB	179/299
DeskJet 500/500c 550C 256K	99
Design Jet Plotter 4 MB	155

PANASONIC LASER

KXP4410/KXP4430 1/2/3/4 MB	77/115/157/197
KXP4420/4450/4451 1/2/3/4 MB	68/110/135/197
KXP4450 1 MB	119
KXP4455 2 MB	139

OKI LASER

OL400 1/2 MB Board	$109/139
OL800/820 2/4 MB Board	129/189
OL810 2/3/4 MB Board	159/189/229

QMS LASER

PS 410 2/3/4 MB	$119/165/189
PS 860, 1700 1/4/8 MB	89/133/179
PS 815, 825, 815MR, 2/4/6	168/232/295

SHARP LASER

9500PS 1 MB	$75
JX-9500/9700 1/1.5/2.5/4	110/135/188/344

OTHERS

Apple Laserwriter II/IINT/IINTX 4 MB	$235
Brother HL-4 2/3/4 MB	119/165/189
Brother HL-8E V 1/2 MB	99/139
Compaq Pagemarq 15 & 20 1/4/8	79/139/266
Kyocera F800, F800Am F800T 2/4	95/137
NEC Silentwriter 90/290	109/124
NEC Silentwriter 95 2 MB	109
TI Microlaser 1 MB	98
Packard Bell Video Memory 1 MB	39

DELL MEMORY

Model		P/N	
433P,33P,325P,33D,325D			
	1 MB	310-2505	$89
	4 MB	310-2507	169
433TE, 425TE & Powerline Workstation			
	2 MB	310-2466	$129
	4 MB	310-2467	189
	8 MB	310-2468	349
	16 MB	310-2469	669
Power Desktop 486D, D/33, D/25, D/20, D/66			
	1 MB	310-2505	89
	4 MB	310-2507	169
	16 MB	310-2625	669
OTHER MODELS			CALL

MEMORY BOARDS

• RAMpAT 16 Bit	$85
• RAMpAT Plus	125
• SIMMply RAM for PS/1 16 Bit	149
• SIMMply RAM	159

TEAC FLOPPY DRIVES

1.44 MB	$39
1.2 MB	49
Dual Floppy 1.2/1.44	119
Heat Sink w/Fan For 486's/Pentium	10/18

TERMS AND CONDITIONS

1. Gov't, University And Qualified Firms PO'S Welcome
2. U.S. and International Shipping VIA UPS, DHL and Federal Express
3. All Sales Must Include Sales Tax
4. All Sales Must Be C.O.D. Cashier/Certified Checks
5. There Is A 15% restocking Charge For All Refused Merchandise
6. Prices Subject To Change W/O Notice, Not Responsible For Typo's
7. Call For Latest Prices
8. 30 Day Warranty on 486 CPU's Call For Pentium Warranty

HOURS: MON-FRI 9am - 5pm

COMPAQ MEMORY

Model		P/N	
LTE 286	1 MB	117081-001	$89
	2 MB	117081-002	125
	4 MB	117081-003	219
SLT 286	1/4 MB	110237-001	99/259
LTE 386S/20	2 MB	12125-001	129
	4 MB	121125-002	225
Contura Lite 20/25			
	2 MB	129769-001	125
	4 MB	129769-002	245
	8 MB	129769-003	395
Portable 386	1 MB	107651-001	125
	4 MB	107653-001	310
Portable III	2 MB	10-7332-001	125
	EBD	167811-001	225
SLT 386	2 MB	118304-001	135
	4 MB	118305-001	225
Deskpro 386S (E. Board)			
	4 MB	11364-001	285
	4 MB	112534-001	189
Deskpro 386/33L, 486/33L, 50/25			
	2 MB	115144-001	105
	8 MB	116561-001	365
	32 MB	116568-001	1475
Deskpro 386/20e, 25e (E. Board)			
	4 MB	113645-001	285
Deskpro 386/20,20e,25e			
	4 MB	113132-001	199
Deskpro 286N, 386N, 386SX/20, 386/25M, 486/33M, 486S/25M, 486S/16M			
	2 MB	118689-001	189
	4 MB	118690-001	345
	8 MB	128877-001	395
Deskpro 486/33L, 486/50L, 386/33L			CALL
Prolinea 3/255 & 3/252S			
	2 MB	141738-001	135
	8 MB	141742-001	315
Prolinea 4/33	2 MB	141682-001	125
	4 MB	141684-001	189
	8 MB	141685-001	345
Other Models			CALL

TOSHIBA MEMORY

T8500, T5200	2/8MB	$129/449
T5100, T3100, T1600	2 MB	139
T3100SX	2/4 MB	129/199
T3200SX, SXC	2/4 MB	125/199
T4400SX, SXC, T6400	2/4 MB	135/249
T4500/4600/4800, T1900/1910, T1950/C 3.3 Volts	8/16 MB	429/769
T3300SL	2/4/6 MB	135/210/299
T3100	2 MB	135
T2200SX, SXE, T1000LE	2/4/8MB	135/210/379
T1800 Satelite	2/4/8 MB	135/210/379

NEC MEMORY

Prospeed 286, 386SX/16	1/2/4 MB	$125/185/269
Prospeed 386	2/4 MB	189/475
Prospeed SX/20	1/4 MB	125/249
Powermate 386/25S	2/8MB	139/369
Powermate 486/25E, 486/33I	2/8 MB	135/365
Powermate Express Series	1/4/16 MB	135/225/689
Other Models		CALL

NOTEBOOK MEMORY

AMIGA 4000	4/8 MB	169/310
Altima LSX	2/4 MB	165/249
AST Premium Exec	1/4 MB	119/245
AST Power Exec 3/25	4/8/16 MB	CALL
Compaq Contura Lite 20/25	2/4/8 MB	135/245/395
Chaplet Notebook	2/4 MB	155/249
Chicony 386SX	4 MB	198
Chicony 386SL/25	2/4 MB	149/229
DECPC 320P	2/4/6 MB	195/269/389
DELL 320N &212N	1/2 MB	99/125
DELL 320N, NC	2 MB	139
DELL 325N, NC	2 MB	179
DELL NL25, NL20	2 MB	179
Epson NBS3	1/4 MB	98/225
Everex Tempo LX	2 MB	135
HP 95LX	1/2 MB	159/279
IBM L40SX, N33/SX	2/4/8 MB	99/189/389
IBM N51SX & SLC	1/4/8 MB	99/155/299
IBM PS/2 N45 SI	2 MB	179
MAC PB 160, 180	6/10 MB	249/425
MAC PB 140, 170	2/4/6 MB	89/175/229
MAC PB 100	2/4/6 MB	89/179/239
Magnavox Metalis 386SX	4 MB	199
NEC Ultralite 286F	1/4 MB	99/199
Packard Bell 386SX	1/4 MB	99/229
Panasonic CF 170/270/370	1/2 MB	85/99
Sharp PC 8501	2 MB	125
Sharp 678/6881	2 MB	129
Sampo NB SX/26, SX/25	2/4 MB	145/225
TI Travelmate 2000	1 MB	129
TI Travelmate 3000	2 MB	135
TI Travelmate 4000	4 MB	229
Zenith Turbosport 386 E	1/4 MB	125/325
Zenith Supersport SX	2 MB	189
Zenith Mastersport	2 MB	189

IBM PS/2 & PS/1 MEMORY

PS/1 286/386SX	2/4 MB	$135/225
PS/1 Consultant Essential/Expert	1/2/4/8 MB	79/99/189/320
386 Valuepoint	2/4/8 MB	99/179/325
486 Valuepoint	4/16 MB	189/595
PS/2 30-286	2 MB	99
50Z, 55SX, 65SX, 70	2/4 MB	99/179
40SX, 35SX,35SL	2/4 MB	99/179
70A21, A61, 121	2 MB	135
80-11, 121, 311	4 MB	245
95,90,P75, PS/1 Pro	2/4/8 MB	135/129/335
16 Bit Exp Bd For 50, 50Z, 60, 65SX	0K	179
32 Bit Exp Board for all 70 & 80 models	0K	189
RISC 6000	16/32/64 MB	745/1490/2890
Other Models		CALL

AST MEMORY

Bravo 3/33(LC) 325S	2/8 MB	$120/325
Bravo 486/25 & 4/33	2/8 MB	135/345
Bravo 486LC	4/8/16 MB	189/325/595
Cupid-32 Board	0K	239
Premium 386C	4 MB	189
Premium SE 450	4 MB	189
Premium 386/25, SX,33,486/25	1 MB	85
Premium II 386, 486	1/4 MB	85/189
Executive Notebook	4 MB	189
Other Models		CALL

SUN MEMORY

SPARC SLC	4 MB	$189
3/60, 80, 4/40, 60, 65	4/16 MB	189/795
SPARC 1 &1+, 1Pc	4/16 MB	189/795
SPARC 10	16/64 MB	745/2375
SUN Classic	16 MB	745
SPARC Server 630np	64 MB	2285
SUN IPX, ELC	4/16 MB	189/825
SPARC II	16 MB	795
Other Models		CALL

LOWEST PRICES
SAME DAY
SHIPPING

VISA

AMT INTERNATIONAL

2393 QUME DRIVE, SAN JOSE, CA 95131
TEL (408) 383-9044 FAX (408) 383-9047, 944-9801

LOWEST PRICES
SAME DAY
SHIPPING

MasterCard

QUANTITY PRICING FOR DEALERS & VARS, PLEASE CALL!!

MEMORY UPGRADES - DUE TO THE RAPIDLY CHANGING PRICES CALL FOR THE LATEST PRICES!

APPLE

Desktops

Macintosh Classic	1MB Exp Board	M6361ll-A	CALL
	2MB Kit	M0219LL-A	CALL
Macintosh Color Classic	2MB Kit	M0219	CALL
Macintosh Classic II,LC,LCII	4MB Kit	N/A	CALL
	8MB Kit	N/A	CALL
Macintosh Plus, SE	2MB Kit	M0219LL-A	CALL
	4MB Kit	N/A	CALL
Macintosh II, IIx	4MB Kit	N/A	CALL
	16MB Kit	N/A	CALL
Macintosh IIFX	4MB Kit	N/A	CALL
Macintosh SE30	4MB Kit	N/A	CALL
	16MB Kit	N/A	CALL
Macintosh IIcx, IIvx IIvi	4MB Kit	N/A	CALL
	8MB Kit	M0513LL/A	CALL
	16 MB Kit	N/A	CALL
	32 MB Kit	N/A	CALL
	64 MB Kit	N/A	CALL
Macintosh IIci, IIsi	4MB Kit	M0292LL-A	CALL
	8MB Kit	M0513ll-A	CALL
	16MB Kit	N/A	CALL
	32 MB Kit	N/A	CALL
	64MB Kit	N/A	CALL
Macintosh LC III	4MB Module	N/A	CALL
LC475, LC520	8MB Module	N/A	CALL
	16MB Module	N/A	CALL
Performa 200	4MB Kit	N/A	CALL
	8MB Kit	N/A	CALL
Performa 400 Series	2MB Kit	M0219ll/A	CALL
405, 410, 430	4MB Kit	N/A	CALL
	8MB Kit	N/A	CALL
Performa 450,460,466,467	4MB Module	M15077LL/A	CALL
475, 476, 550	8MB Module	M1508LL/A	CALL
	16MB Module	N/A	CALL
	32MB Module	N/A	CALL
Performa 600	4MB Kit	MO292LL/A	CALL

Systems

Centris 610, 650	4MB Module	M1507LL/A	CALL
Quadra 610, 650	8MB Module	M1508LL/A	CALL
	16MB Module	N/A	CALL
Quadra 605/800	4MB Module	N/A	CALL
Quadra 840AV	8MB Module	N/A	CALL
	16MB Module	N/A	CALL
NEW!	32MB Module	N/A	CALL
Centris 660AV	8MB Module	N/A	CALL
Quadra 660AV	16MB Module	N/A	CALL
NEW!	32MB Module	N/A	CALL
Quadra 700, 900, 950	4MB Kit	M5952LL-A	CALL
		M0292LL-A	CALL
	16MB Kit	N/A	CALL
	32MB Kit	N/A	CALL
	64MB Kit	N/A	CALL
Workgroup Server 60	4MB Module	N/A	CALL
Workgroup Server 80	8MB Module	N/A	CALL
NEW!	16MB Module	N/A	CALL
Power Macintosh	8MB Module	(2)M1507LL/A	CALL
6100/60, 6100/60AV	16MB Module	M2838LL/A	CALL
7100/66, 7100/66AV	32MB Module	M2839LL/A	CALL
8100/80, 8100/80AV	64MB Module	N/A	CALL

Printers

PowerBook 100,140	2MB Card	M1032LL/A	CALL
	4MB Card	M1033LL/A	CALL
	6MB Card	N/A	CALL
PowerBook 145, 170	4MB Card	M4664LL/A	CALL
	6MB Card	N/A	CALL
PowerBook 145B	4MB Card	M4664LL/A	CALL
PowerBook 160, 165, 180	4MB Card	M4664LL/A	CALL
	6MB Card	M4664LL/A	CALL
	8MB Card	N/A	CALL
	10MB Card	N/A	CALL
PowerBook 165C, 180C	4MB Card	M4664LL/A	CALL
	6MB Card	N/A	CALL
	8MB Card	N/A	CALL
	10MB Card	N/A	CALL
PowerBook Duo 210, 230	4MB Card	M4184LL/A	CALL
	8MB Card	M4185LL/A	CALL
PowerBook Duo 250	4MB Card	M4184LL/A	CALL
NEW!	8MB Card	M4185LL/A	CALL
	20MB Card	N/A	CALL
PowerBook Duo 270C	4MB Card	M4184LL/A	CALL
NEW!	8MB Card	M4185LL/A	CALL
	20MB Card	N/A	CALL
	28MB Card	N/A	CALL
Newton Message Pad	1MB SRAM Card	H0028LL/A	CALL
NEW!	2MB SRAM Card	N/A	CALL
	4MB SRAM Card	N/A	CALL
	8MB SRAM Card	N/A	CALL
	16MB SRAM Card	N/A	CALL

Printers

LaserWriter II, IINTX IINTX-J	4MB Kit	M6006	CALL
LaserWriter IIf, IIg	4MB Kit	M5952LL/A	CALL
LaserWriter Pro 600,630	4MB Module	N/A	CALL
	16MB Module	N/A	CALL
LaserWriter Select 310,360	1MB Module	M2093G/A	CALL
	4MB Module	M2094G/A	CALL
LaserWriter Pro 810	4MB Board	M1442G/A	CALL
NEW!	8MB Board	M1443G/A	CALL

AST

Desktops

286 Rampage Plus	0MB Exp Board	N/A	CALL
Advantage Plus 486 Series	4MB Kit	500510-008	CALL
486DX/33	4MB Kit	501168-001	CALL
486DX2-50	8MB Kit	500824-001	CALL
486DX2-66		5001168-002	CALL
Advantage 386SX/20,25	2MB Kit	500962-001	CALL
Advantage Pro 386SX/25	500891-005	CALL	
	8MB Kit	500962-002	CALL
		500891-006	CALL
Advantage Pro	2MB Kit	500987-001	CALL
486DX/33		500891-007	CALL
486SX/25	4MB Module	500987-002	CALL
		500891-008	CALL
	8MB Module	500987-003	CALL
	16MB Module	500987-004	CALL
	32MB Kit	500987-005	CALL
Bravo 286/8,386SX/16	2MB Kit	500510-002	CALL
		500710-004	CALL
Bravo 286/16,386SX/20	2MB Kit	500510-002	CALL
386SX/25 (2,8MB only)	500710-004	CALL	
	8MB Kit	500824-001	CALL
		501168-002	CALL
Bravo LC4/25s	2MB Kit	500987-001	CALL
4/33		500891-007	CALL
4/33s	4MB Module	500987-002	CALL
4/50d	500891-008	CALL	
4/66d	8MB Kit	500987-003	CALL
Bravo 486 LP Series	16MB Module	500987-004	CALL
Bravo 486/66 MT	32MB Kit	500987-005	CALL
Premium 386C (4MB only)	4MB Kit	500510-008	CALL
		501168-001	CALL

Desktops

Premmia 4/33, 4/33s	4MB Kit	501159-001	CALL
4/50d, 4/66d	8MB Kit	501159-003	CALL
	16MB Kit	501159-004	CALL
	32MB Kit	501159-004	CALL
	64MB Kit	501159-005	CALL

Notebooks

PowerExec 4/25SL	4MB Module	501166-001	CALL
color, ColorPlus	16MB Module	501166-003	CALL
PowerExec 486	4MB Module	501318-001	CALL
color, ColorPlus	16MB Module	501318-002	CALL
PowerExec 486	4MB Module	500984-003	CALL
Special Edition	16MB Module	500984-003	CALL
PowerExec 3/33,3/25SL	2MB Module	500984-004	CALL
PowerExec EL	4MB Module	500984-001	CALL
	8MB Module	500984-002	CALL
	16MB Module	500984-003	CALL

PremiumExec

286/12	1MB Module	500814-001	CALL
386sx/20	4MB Module	500814-003	CALL
386SX/25 (4MBonly)		500814-004	CALL
386SX/25C (4MB only)			

AT&T

Printers

AT&T 593	0MB Exp Board	N/A	CALL
	2MB Exp Board	N/A	CALL
	4MB Exp Board	N/A	CALL
	4MB Exp Board	N/A	CALL

BROTHER

Printers

HL-4,4PS,4V,4Ve	0MB Board	N/A	CALL
	1MB Exp Board	MB-410	CALL
	2MB Exp Board	MB-420	CALL
	4MB Board	MB-440	CALL
HL-6 Series	0MB Exp Board	MB-600	CALL
NEW!	2MB Exp Board	N/A	CALL
	4MB Exp Board	N/A	CALL
HL-8,8e,8v	0MB Exp Board	N/A	CALL
	1MB Exp Board	MB-810	CALL
	2MB Board	MB-820	CALL
HL-10V,10DV	2MB Exp Board	MB-1020	CALL
10PS, 10DPS	4MB Board	MB-1040	CALL
HL-10H	1MB Module	MS-1	CALL
NEW!	2MB Module	MS-2	CALL
	4MB Module	MS-4	CALL
	8MB Module	MS-8	CALL
	8MB Module	MS-8	CALL

CANON

Notebooks

NoteJet 486	2MB Module	N/A	CALL
(BN-22)	4MB Module	N/A	CALL
NEW!	8MB Module	N/A	CALL

Printers

LBP-4, 4 Plus, 4 Lite	1MB Exp Board	S63-2230	CALL
	2MB Board	N/A	CALL
LBP-4sx	0MB Exp Board	N/A	CALL
	1MB Exp Board	R03-0010-000	CALL
	2MB Board	R03-0020-000	CALL
LBP-8II,8IIR, 8IIT	0MB Board	N/A	CALL
	0MB Board	N/A	CALL
	1MB Exp Board	S63-1300	CALL
	2MB Exp Board	S63-1880	CALL
	4MB Board	N/A	CALL
LPB-8SX	0MB Exp Board	N/A	CALL
	1MB Exp Board	R03-0030-000	CALL
	2MB Board	N/A	CALL
LBP-8III,8III,8IIIR	1MB Exp Board	S63-2340	CALL
	2MB Exp Board	S63-2350	CALL
	3MB Board	S63-2360	CALL
LBP-8IV,LBP-4U	1MB Module	N/A	CALL
	4MB Module	N/A	CALL
	8MB Module	N/A	CALL
LBP-430	1MB Module	R73-3009001	CALL
	4MB Module	R73-3017001	CALL
LBP-860	1MB Module	N/A	CALL
NEW!	2MB Module	N/A	CALL
	4MB Module	N/A	CALL
	8MB Module	N/A	CALL
	16MB Module	N/A	CALL
	32MB Module	N/A	CALL

C.ITOH

Printers

CI-4,4Plus,8E	1MB Kit	CI4MD-1M	CALL
CI-6	0MB Exp Board	N/A	CALL
	2MB Exp Board	N/A	CALL
	4MB Board	N/A	CALL
CI-8	1MB Module	CI8MD-1M	CALL
	2MB Module	CI8MD-2M	CALL

COMPAQ

Desktops

DeskPro 286e	1MB Module	113131-001	CALL
386/20,20e,25,25e	4MB Module	113132-001	CALL
	4-12MB Exp Board	113645-001	CALL
DeskPro286N	0MB Exp Board	118700-001	CALL
	1MB Module	118688-001	CALL
	4MB Module	118690-001	CALL
DeskPro 386s	1MB Card	113646-001	CALL
	4MB Card	112534-001	CALL
	4-12 MB Exp Board	113634-001	CALL
DeskPro 386/16	4-8MB Exp Board	108070-001	CALL
DeskPro 386s/20	1MB Module	118688-001	CALL
	2MB Module	118689-001	CALL
	4MB Module	118690-001	CALL
DeskPro386N,386s/20N	0MB Exp Board	118700-001	CALL
	1MB Module	118688-001	CALL
	2MB Module	118689-001	CALL
	4MB Module	118690-001	CALL
DeskPro i Series	1MB Module	118688-001	CALL
SystemPro/LT 486/33	2MB Module	118689-001	CALL
	4MB Module	118690-001	CALL
	8MB Module	128877-001	CALL
		128877-002	CALL
Prosignia PC Server 486/33	1MB Module	118688-001	CALL
486DX2-66	2MB Module	118689-001	CALL
	4MB Module	118690-001	CALL
	8MB Module	128877-001	CALL
		128877-002	CALL
	16MB Module	149320-001	CALL
	32MB Module	149147-001	CALL
Deskpro 386/25m,386/33M	0MB Board	129160-001	CALL
486s/16M,486s/25M,486/33M	1MB Module	118688-001	CALL
486DX2/50M,486DX2/66M	2MB Module	118689-001	CALL
SystemPro/LT 386/25,386/33	4MB Module	118690-001	CALL
486DX2/50,486SX/25	8MB Module	128877-001	CALL
Deskpro 5/60M,5/66M	16MB Module	149949-001	CALL
Deskpro XE 560	16MB Kit	149949-001	CALL
NEW!	32MB Kit	149912-001	CALL
	64MB Kit	149912-001	CALL
	128MB Kit	149914-001	CALL
Deskpro 386/33L,486/33L	2MB Card	115144-001	CALL
Deskpro 486/25,486/50L	8MB Card	116561-001	CALL
Systempro 386/33,486/33	32MB Card	116568-001	CALL
486/33-1020e,486/33IE			
486/33-2040e,486/33-680e			
Deskpro XE 433s,XE 450	2MB Module	118689-001	CALL
XE 466		141683-001	CALL
	4MB Module	118690-001	CALL
		141684-001	CALL
	8MB Module	128877-001	CALL
		141685-001	CALL
Prolinea 3/25S,3/25ZS	2MB Kit	141738-001	CALL
	8MB Kit	141742-001	CALL
Prolinea 4/25S,4/33,4/50	1MB Module	141682-001	CALL
4/66,CDS, NET/25s	2MB Module	141683-001	CALL
Net/25tr,Net/25e	4MB Module	141684-001	CALL
Presario 400 Series	8MB Module	141685-001	CALL
Presario 600 Series	1MB Module	141682-001	CALL
	2MB Module	141683-001	CALL
	4MB Module	141684-001	CALL
	8MB Module	141685-001	CALL
	16MB Module	190747-001	CALL
Prolinea MT family	1MB Module	141682-001	CALL
Presario 800 series	2MB Module	141833-001	CALL
	4MB Module	141684-001	CALL
	8MB Module	141685-001	CALL
	16MB Module	190747-001	CALL
	32MB Module	190748-001	CALL

Systems

Systempro/XL	16MB Kit	139132-003	CALL
Prosignia 5/60	136816-001	CALL	
NEW!	32MB Kit	139132-004	CALL
		136817-001	CALL
	64MB Kit	139130-001	CALL
		139132-005	CALL
	128MB Kit	139918-001	CALL
		139132-007	CALL
ProLiant 1000 486DX2/66	4MB Module	141684-001	CALL
Prosignia VS		118690-001	CALL
	8MB Module	128877-001	CALL
		128877-002	CALL
		141685-001	CALL
	16MB Module	149320-001	CALL
		190747-001	CALL
	32MB Module	149147-001	CALL
		190748-001	CALL
ProLiant 1000 5/60	16MB Kit	136816-001	CALL
ProLiant 2000 Family		149949-001	CALL
ProLiant 4000 Family	32MB Kit	136817-001	CALL
		149913-001	CALL
	64MB Kit	149341-001	CALL
		149913-001	CALL
	128MB Kit	139918-001	CALL
		149914-001	CALL

Notebooks

Contura 3/20,3/25,3/25C	2MB Card	139497-001	CALL
	4MB Card	139498-001	CALL
	8MB Card	139499-001	CALL
Contura 4/25,CX,EX	4MB Card	146520-001	CALL
	8MB Card	146521-001	CALL
	16MB Card	146531-001	CALL
Contura Aero	4MB Card	190532-001	CALL
	8MB Card	190597-001	CALL
Concerto	4MB Card	144795-001	CALL
3.3 VOLT!!	8MB Card	144795-002	CALL
NEW!	16MB Card	144795-003	CALL
LTE 286	1MB Card	117081-001	CALL
	2MB Card	117081-002	CALL
	4MB Card	117081-003	CALL
LTE 386s/20	1MB Card	121125-001	CALL
	2MB Card	N/A	CALL
	4MB Card	121125-002	CALL
LTE Lite/20,25,25C,25E	2MB Card	129769-001	CALL
	4MB Card	129769-002	CALL
	8MB Card	129769-003	CALL
LTE Lite 4/25,25C,33C	4MB Card	142337-002	CALL
	8MB Card	142337-003	CALL
	16MB Card	142337-004	CALL
LTE Elite	4MB Card	199013-001	CALL
3.3 VOLTS!	8MB Card	199014-002	CALL
NEW!	16MB Card	144795-003	CALL
SLT/286	1MB Card	110235-001	CALL
	4MB Card	110237-001	CALL
SLT386s/20	1MB Card	118303-001	CALL
	2MB Card	118304-001	CALL
	4MB Card	118305-001	CALL
Portable 486	1MB Module	118688-001	CALL
	2MB Module	118689-001	CALL
	4MB Module	118690-001	CALL
	8MB Module	128877-001	CALL

Printers

Pagemarq 15 (4/8/16MB)	2MB Kit	126359-001	CALL
Pagemarq 20	4MB Kit	126360-001	CALL
	8MB Kit	126361-001	CALL
	16MB Kit	126362-001	CALL

DATAPRODUCTS

Printers

LZR 650,950	1MB Card	MM610	CALL
	1.5MB Card	MM602	CALL
	2.5MB Card	MM603	CALL
	4MB Card	MM604	CALL
LZR 855/PS	1MB Card	N/A	CALL
	2MB Card	N/A	CALL
	4MB Card	N/A	CALL
LZR 960,965	4MB Board	N/A	CALL
LZR 1560,2060N	4MB Board	N/A	CALL

DEC

Desktops

DECpc 333SX LP, 420SX	2MB Kit	FR-PC7XM-AP	CALL
433 Workstation 433T	8MB Kit	FR-PC7XM-BB	CALL
DECpc425i	2MB Kit	PC6XM-CD	CALL
	8MB Kit	PC6XM-CE	CALL
DECpc LPv,LPx,MT	4MB Module	FR-PC7M-AA	CALL
	16MB Module	FR-PC74M-AB	CALL
DECpc AXP 150	16MB Kit	PB2MA-BD	CALL
	64MB Kit	PB2MA-RF	CALL
DECpcDT	4MB Module	PC6XM-EA	CALL
	16MB Module	PC6XM-EB	CALL
	32MB Module	N/A	CALL
	64MB Module	FR-PCT7M-AA	CALL
DECpcST 425ST, 450ST	4MB Module	FR-PCTAM-CC	CALL
	466ST,560ST	8MB ModuleFR-PCTAM-CD	
CALL			
	16MB Module	FR-PCTAM-CE	CALL
DECpcXL 433dx,	8MB Kit	FR-PC77M-AA	CALL
	16MB Kit	FR-PC77M-AB	CALL
	32MB Kit	FR-PC77M-AC	CALL
	64MB Kit	FR-PC77M-AD	CALL

DELL

Desktops

Power Desktop 486P Series	1MB Module	310-2505	CALL
Power Desktop 486D Series	4MB Module	310-2507	CALL
Precision 486 Series	16MB Module	310-2525	CALL
4000/XE Series	8MB Kit	310-3335	CALL
	32MB Kit	310-3337	CALL
	64MB Kit	N/A	CALL
Performance ME Series	4MB Module	310-3334	CALL
NEW!	8MB Module	310-3335	CALL
	16MB Module	310-3336	CALL
	32MB Module	310-3337	CALL
PowerLine Workstations	2MB Kit	310-2466	CALL
DE, SE Series	4MB Kit	310-2467	CALL
NEW!	8MB Kit	310-2468	CALL
	16MB Kit	310-2469	CALL
	32MB Kit	310-2630	CALL
Performance M,L,T,Series	4MB Module	310-3325	CALL
	16MB Module	310-3327	CALL

Systems

System 316LT, 320LT,320LX	2MB Kit	310-2349	CALL
316SX,320SX(rev.1), 325SX			
System 320SX (rev 2) 325D	1MB Module	310-2505	CALL
325P, 333D,333P,433P	4MB Module	310-2507	CALL
System 425TE, 433TE	2MB Kit	310-2466	CALL
	4MB Kit	310-2467	CALL
	8MB Kit	310-2468	CALL
	16MB Kit	310-2469	CALL

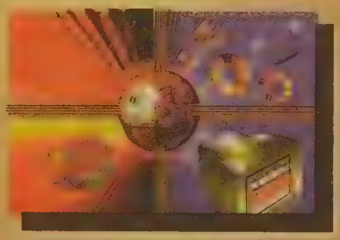
EPSON

Printers

ActionLaser 1000, 1500	512KB Kit	N/A	CALL
ActionLaser 5000,5200	2MB Module	N/A	CALL
ActionLaser Plus	0MB Exp Board	N/A	CALL
	2MB Exp Board	IBS401	CALL
EPL-7000	0MB Exp Board	N/A	CALL
	1MB Exp Board	C822031	CALL
	2MB Exp Board	C822011	CALL
	3MB Exp Board	C829042	CALL
ActionLaser II	1MB Exp Board	N/A	CALL
EPL-4000,EPL-8000	2MB Exp Board	C0822061	CALL
EPL-4300	5MB Exp Board	N/A	CALL

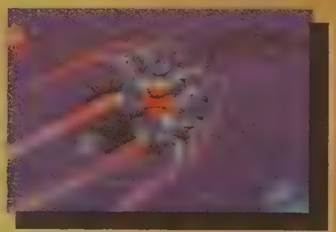
Buy them with confidence!
Available Now!
OS/2 2.1 Driver
Chicago
Windows 4.0 Ready!

The SPiDER 32 Series cards are integrated with standard accelerators: hardware cursor and Bitblt. These cards can operate up to 1280x1024 resolution, 72Hz refresh rate, and 24-bit true color mode. They provide users with flexibility, performance, SPiDER's superior softwares and support, at very affordable prices. Exp. 2MB DRAM.

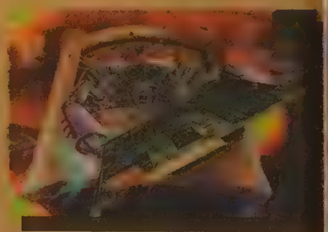


In the heart of the SPiDER 64 VLB / PCI is a 64-bit GUI engine. This advanced accelerator incorporates a 64-bit BitBlt (Bit Block Transfer), hardware cursor, and color expansion in true-color modes. Display memory expandable up to 4MB DRAM.

The powers of the Black Widow Plus is an integrated 32-bit graphics co-processor. This co-processor and the fast VRAM assist the main accelerator to achieve the optimum processing speed of Windows, CAD, OS/2 and other "GUI" applications. Display memory expandable up to 2MB VRAM.



The SPiDER 256 Cache is a break-through in video graphics technology. By incorporating additional DRAM for video caching, processing Windows, CAD, OS/2, Windows NT, and any DOS applications can be achieved at an amazing speed. Display memory expandable up to 2MB DRAM.



The Tarantula 64 is the professional graphics accelerator can operate at 75Hz non-interlaced in 1024x768 resolution with 16.7 million colors. It also supports 1600x1200 with 64K colors in non-interlaced mode. In addition, its 32-bit DAC can optimize the performance and clarity of high refresh rates in Windows for professional quality photo images. Exp. 4MB VRAM.

Let our SPiDER invade your computer!

(Retailers Please Call (408) 526-0535 for Your Distributors)

BBS (408) 526-1219

SPiDER Graphics, Inc.®
580 Charcot Ave., San Jose, CA 95131 • 408 526-0535

SPiDER Graphics, Inc. and SPiDER 32 VLB/PCI/ISA, SPiDER 64 VLB/PCI, SPiDER 256 Cache, SPiDER Black Widow Plus, SPiDER Black Widow, Taratula 64 are registered trademarks, and all other product or brand names are property of their respective owners. ©1994 SPiDER Graphics, Inc. All rights reserved. Features and specifications subject to change without notice

END-USERS PLEASE CALL THE FOLLOWING DEALERS:

Whole Earth Access	1-800-Whole Earth (946-5332)
NCA, San Jose	(408) 363-4600
NCA, Sunnyvale	(408) 739-9010
ASA Computer, Inc., Santa Clara	(408) 496-6953
Paramount Computer, Pleasant Hill	(510) 680-0204
Art Computer, Milpitas	(408) 946-7852
Computer Express, Santa Clara	(408) 247-1996
Pixel USA Computer, San Jose	(408) 929-7218
Computer Art II, Sacramento	(916) 366-7128
UMiracle Microsystems, Fremont	(510) 226-6746

The Perfect Graphics Accelerator

TARANTULA 64

The Tarantula 64 possesses all the characteristics of a professional graphics accelerator. With high refresh screens, this "Big SPiDER" can operate at 75Hz non-interlaced in 1024x762 resolution with 16.7 million colors. It also supports 1600x1200 with 64K colors in non-interlaced mode. In addition, the 32-bit true color format DAC can optimize the performance and clarity of high refresh rates in Windows for professional quality photo images.

RESOLUTION	COLORS	MINIMUM MEMORY REQUIRED	SELECTABLE REFRESH RATES
640 x 480	16 to 16M	2MB	60, 72, 75
800 x 600	16 to 16M	2MB	60, 72, 75, 87i
1024 x 768	16 to 64K	2MB	60, 70, 75, 87i
1024 x 768	16M	4MB	60, 70, 75, 87i
1280 x 1024	16	2MB	90i
1280 x 1024	256	2MB	60, 72, 75, 90i
1280 x 1024	64K	4MB	60, 72, 75, 90i
1600 x 1200	256	2MB	60
1600 x 1200	64K	4MB	60

Available colors: 16, 256, 32K, 64K, 16M, i=Interlaced
(Graphics modes support varies between applications.)

COMPATIBLE DRIVERS SUPPORT:

MS-Windows 3.1
MS-Windows for Workgroups
MS-Windows NT
MS-Word (DOS)
OS/2 v2.1
Autodesk ADI 4.2
  AutoCAD
  AutoShade
  3D Studio
Microstation
Lotus 1-2-3 Release 2.x

WordPerfect 5.1
CADKEY/DataCAD
CADVANCE
VersaCAD
Generic CADD 6.0
SCO Open Desktop

Also Available: Japanese and Chinese MS-Windows Drivers. (Included with this graphics card or packaged with the software under S3)

ARCHITECTURE:

Accelerator:	S3-Vision964
Bus Available:	32-Bit PCI 32-Bit VLB
Display Memory:	2MB or 4MB
VRAM	
Video Connector:	DB-15
Video Signal:	Analog

A better card at a better price

FEATURES:	SPIDER TARANTULA 64	DIAMOND STEALTH 64
• Up to 4MB VRAM	YES	YES
• 1024 by 768 resolution in 24-bit color (16 Million Color)*	YES	YES
• On-the-fly resolution change*	YES	YES
• On-the-fly refresh rate change	YES	NO
• Feature connector*	YES	YES
• 64-bit graphics accelerator engine*	YES (S3-964)	YES (S3-964)
• High dot clock (high refresh rate)*	YES	YES
• Virtual screen*	YES	YES
• Refresh rate check	YES	NO
• Easy installation program	YES	NO
• 32-Bit RAMDAC	YES	YES
• Local market price (w/2MB)	[illegible]	[illegible]

* Feature that a "perfect graphics accelerator card" should have as defined by PC Magazine July 1994 Issue.

The choice is clear!
TARANTULA 64

(Retailers Please Call (408) 526-0535 for Your Distributors)

[illegible]

NCA, San Jose	(408) 363-4600
NCA, Sunnyvale	(408) 739-9010
ASA Computer, Inc., Santa Clara	(408) 496-6953
Paramount Computer, Pleasant Hill	(510) 680-0204
Art Computer, Milpitas	(408) 946-7852
Computer Express, Santa Clara	(408) 247-1996
Pixel USA Computer, San Jose	(408) 929-7218
HD Computer	(408) 720-0493
Computer Art II, Sacramento	(916) 366-7128
UMiracle Microsystems, Fremont	(510) 226-6746
Sigma-Com	(408) 942-4881

SPiDER® Graphics, Inc.

MICROSOFT. WINDOWS. COMPATIBLE

580 Charcot Ave., San Jose, CA 95131
408 526-0535 • FAX 408 526-1622

All trade names referenced are the service mark, trademark, or registered trademarks of their respective manufacturers. SPiDER reserves the right to change specifications without notice. © Copyright SPiDER Graphics, Inc.

SCHWAB SYSTEMS
SINCE 1987

SCHWAB COMPUTER

260 N. WOLFE RD. • SUNNYVALE, CA 94086 • HOURS: M-F 9-6 SAT 11-4

WE ARE GREAT AT BUILDING SYSTEMS

TEL:(408)245-6666 • FAX:(408)245-3103

SF
101
FAIR OAKS
101
SJ
FAIR OAKS
260
CENTRAL
EXPWY
EL
CAMINO
N. WOLFE
REAL

MasterCard VISA AMERICAN EXPRESS

SC P5-60 VESA/PCI SYSTEM

-256K Cache VESA PC Board
-8 MB RAM
-1.2 or 1.44 MB Floppy Drive
-540 MB IDE Hard Disk
-VESA/PCI SVGA Accelerator w/1 MB
-15" SVGA Monitor 1280 NI 0.28mm
-Mouse, Keyboard, I/O, Mini-Tower Case

$1888

SC 486DX2-66 EISA NETWORK SERVER

-256K EISA System Board
-8 MB RAM
-1.2 or 1.44 MB Floppy Drive
-540 MB IDE Hard Disk
-14" Mono Monitor and Adapter
-Mouse, Keyboard, I/O, Tower Case

$1228

SC 486SX-25MHZ STARTER/WORKSTATION

-128K Cache VESA System Board
-4 MB RAM
-1.2 MB or 1.44 MB Floppy Drive
-210 MB IDE Hard Drive
-SVGA Adapter w/512K
-14" SVGA Monitor 1024 0.28mm
-Mouse, Keyboard, Tower Case & I/O

$868

SC486DX2-66 VESA CAD STATION

-256K Cache VESA PC Board
-8 MB RAM
-1.2 or 1.44 MB Floppy Drive
-350 MB IDE Hard Disk
-Orchid Kelvin 1280 VESA SVGA Card w/1 MB
-17" SVGA Monitor 1280 NI 0.28mm
-Mouse, Keyboard, I/O, Tower Case

$1788

SC 486DX-33 MULTIMEDIA PC

-256K VESA System Board
-8 MB RAM
-1.2 MB or 1.44 MB Floppy Drive
-350 MB Hard Disk
-VESA SVGA Accelerator w/1 MB
-14" SVGA Monitor 1024 NI 0.28mm
-Mitsumi Double Speed Internal CD-ROM
-Spectrum 16 16-Bit Stereo Sound Card w/MIDI & Voice Synt.
-Mouse, Keyboard, Tower Case, I/O, Speakers
-14 CD Titles

$1488

SC 386DX-40 VALUE PAK

-128K Cache ISA System Board
-2 MB RAM
-1.44 MB Floppy
-210 MB Hard Disk
-SVGA Monitor and Card
-Mouse, Tower Case, I/O & Keyboard

$699

PATRIOT 4000 MULTIMEDIA NOTEBOOK

- Intel SL Enhanced Processor
- 4MB RAM Expandable to 32MB
- 1MB Flash ROM Programmable BIOS
- Detachable 3.5" 1.44MB Floppy Drive
- 170 MB IDE Hard Drive (250/340/540 available)
- 32 Bit VLB SVGA 1024x768 w/1MB RAM
- 9.5" Viewable Screen Size
- Mono, Dual Scan or Active Matrix
- 86 Keys w/Inverted T Cursor
- Extra Large 25mm Built- In Trackball
- PCMCIA 2X Type II, 1 Type III Slots
- 1Serial, 1Parallel, 1 Ext SVGA, Docking Station Ports
- Built-In Sound Card (Sound Blaster Comp) w/1 Line In, 1 Line Out, 1 Mic
- Rechargeable NiMH Battery
- Black Carrying Case
- Auto Switching AC/DC Adapter
- Mono 11.4"x8.7"x1.77"5.5LBS
- Dual Scan 11.4"x8.7"x1.88", 5.9LBS
- Active Matrix 11.4"x8.7x2", 5.9LBS

	MONO	DUAL SCAN	ACTIVE MATRIX
486SX-33	$1490	$1990	$2950
486DX-33	$1630	$2130	$3090
486DX2-66	$1690	$2190	$3160

WE WILL NOT BE UNDERSOLD! CALL FOR EVERYTHING YOU NEED.

MOTHERBOARDS

486 VLB 33/66 256KC w/o CPU	$90
486 SX 25 w/CPU 128KC	150
386 DX-40 w/CPU 128K Cache	95

HARD DRIVES

210 MB IDE	$170
340 MB IDE	199
540 MB IDE	280
1.2 GB SCSI	690

MONITORS

14" Mono	$85
14" SVGA 0.28mm	230
14" SVGA NI 0.28mm	250
15" SVGA NI 0.28mm	350
17" SVGA 1280 NI	680
20" SVGA 1280 NI	999

VIDEO ADAPTERS

SVGA w/512K	$38
SVGA w/1 MB	59
Orchid Kelvin VLB w/1 MB	149
Stealth 32 VLB w/1 MB	159
ATI Ultra Pro VLB w/2 MB	249

FLOPPY & TAPE BACK-UP

1.2 MB 5.25"	$48
1.44 MB 3.5"	38
Teac 1.2 & 1.44 MB	94
Colorado 120 MB TB	125
Colorado 250 MB TB	175

MODEMS

24/96 Internal	$35
14.4/14.4 Fax Internal	89
14.4/14.4 Fax External	119

MULTIMEDIA UPGRADE KIT

-Sony Double Speed CD-ROM
-16 Bit Stereo Sound Card
-MIDI & Video Synthesizer
-Stereo Speakers
-10 CD Titles $250

NETWORKING

NE 1000 8 Bit	$35
NE 2000 Comp 16 Bit	35
SMC Elite 16 Bit	115
3COM	CALL
LANtastic Starter	489
LANtastic Adapter	189

CD-ROM

Panasonic Int w/Card Dbl. Speed	$145
Toshiba 3401B Int	289
Toshiba 3401B Ext	359
Sound Card	79

CASES

Mini Tower w/230W	$4
Mini Desktop w/220W	5
Mid Tower w/250W	7
Full Tower w/250W	9
Full Tower w/300W	13

PRINTERS

Panasonic 2123	$20
Panasonic 2624	33
HP DeskJet 560C	56
HP 4L Laser Printer	CAL
OKI Laser 400e	48

▪WE OFFER LIFETIME FREE TECHNICAL SUPPORT WITH EVERY SCHWAB SYSTEM SOLD PLUS ONE YEAR PARTS AND LABOR WARRANTY.
▪PRICES AND AVAILABILITY AND SPECIFICATIONS ARE SUBJECT TO CHANGE W/O NOTICE ▪NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS ▪GOVERNMENT, UNIVERSITY AND QUALIFIED FIRMS PO ACCEPTED

ART COMPUTER TECH INC.

424 S.MAIN STREET., MILPITAS, CA 95035
Tel. (408) 946-7852 * Fax (408) 946-7892

The Best in Service, Support, and Price

We have the lowest priced PENTIUM's in town! Proof? Just check Compuserve and you will be referred to us by our loyal and satisfied customers.

SYSTEM	MainBoard +CPU	BasicSystem
Pentium P5-90/256K PCI+VLB USA	$1080	$1323(*)
Pentium P5-90/256K PCI Intel	$1050	$1292(*)
Pentium P5-90/256K VLB	$1038	$1271(*)
Pentium P5-66/256K PCI Intel	$856	$1098(*)
Pentium P5-60/256K PCI Intel	$732	$974(*)
Pentium P5-66/256K VLB+PCI	$796	$1039(*)
Pentium P5-60/512K VLB+PCI	$670	$914(*)
486DX4-100/256K VLB	$782	$921
486DX4-75/256K VLB	$660	$800
486DX2-66/256K PCI+VLB	$400	$643(*)
486DX-33/256K PCI+VLB	$367	$610(*)
486DX2-66/128K ISA/VLB Intel	$306	$445
486DX-33/128K ISA/VLB Intel	$273	$411
486DX2-66/128K ISA/VLB-AMD	$283	$422
486DX-40/128K ISA/VLB -AMD	$219	$363
486BL-75/256 IBM VLB w/Math-Co	$328	$570(*)
486SLC2-66/64K IBM VLB w/Math-Co	$213	$352
486DX2-66/256K Genoa VLB	$341	$480
486DX-40/256K Genoa VLB	$255	$391
486DX-33/256K Genoa VLB	$308	$447
486DX2-66/256K EISA VESA	$450	$575
486DX-40/256K EISA VESA	$345	$488
486DX-33/256K EISA VESA	$400	$543
486SX-25C VLB	$130	$269
386DX-40/128K ISA	$83	$221

SPECIAL BASIC SYSTEM

- * Motherboard w/CPU+4MB RAM 70ns
- * 1.2 and 1.44MB FDD
- * IDE 2FD/2HD Controller w/ I/O 2S/1P/1G
- * 210 MB Hard Drive
- * 1024x768 .28DP 14" SVGA Monitor
- * 512K SVGA Card
- * 101 Enhanced Keyboard
- * Enhanced Case w/230 Watt Power Supply

Pentium P5-90/256K PCI+VLB (USA made)	$1769
Pentium P5-90/256K PCI (Intel MB)	1737
Pentium P5-90/256K VLB	1717
Pentium P5-66/256K PCI (Intel MB)	1543
Pentium P5-60/256K PCI (Intel MB)	1419
Pentium P5-66/256K VLB+PCI	1484
Pentium P5-60/256K VLB+PCI	1359
486DX4-100/256K VLB	1470
486DX4-75/256K VLB	1349
486 DX2-66/256K PCI+VLB	1098
486 DX-33/256K PCI+VLB	1055
486 DX2-66/128K ISA/VLB Intel	994
486 DX-33/128K ISA/VLB Intel	960
486 DX2-66/128K ISA/VLB AMD	970
486 DX-40/128K ISA/VLB AMD	912
486 BL-75/256K IBM VLB w/Math-Co	1016
486 SLC2-66/64K IBM VLB w/Math-Co	901
486 DX2-66/256K Genoa VLB	1030
486 DX-40/256K Genoa VLB	948
486 DX-33/256K Genoa VLB	996
486 DX2-66/256K NICE EISA VESA	1119
486 DX-40/256K NICE EISA VESA	1033
486 DX-33/256K NICE EISA VESA	1008
486 SX-25C VLB	812
38640/128K ISA	770

BESTBUYSYSTEM

486-66/256 GENOA TurboExpress VL

- + Intel CPU & Cooling Fan
- + 8MB RAM 30 pin
- + 1.2&1.4 FD
- + 210MB HD
- + SPiDER PRO VLB w/ 1mb, IDE VLB built in
- + ViewSonic 6E monitor
- + Mini case
- + 101Enhanced keyboard
- + Microsoft Mouse + Pad

$1240

OPTIONS

	Add
-Non-int Monitor	110
-Viewsonic 4E Monitor	45
-Mitac Monitor 15"	110
-SPiDER 32VLB w/1MB	45
-Trident 1MB	20
-SPiDER Pro VLB w/IDE I/O	50
-250 MB Hard Drive	[illegible]
-340 MB Hard Drive	35
-420 MB Hard Drive	40
-540 MB Hard Drive	120
-IDE VESA Localbus	10
-Medium case	25
-Full Tower	40
-Logitech Mouse	15
-Microsoft mouse	25

BASIC SYSTEM includes: Motherboard & CPU, 1MB RAM, 1:1 2HD/2FD controller, w/ 1P/2S/1G, 1.2 or 1.44 MB FD, enhanced case w/Power supply, 101 Keyboard.

HARDDRIVES

130mb/15ms (IDE)	150
170mb(IDE)	155
210mb(IDE) Conner	166
260mb(IDE) Seagate	195
280mb/14ms (IDE) IBM	192
340mb/13ms (IDE) MAXTOR	199
340mb (IDE) IBM	199
420mb/12ms (IDE) Conner	215
540mb/12ms (IDE) Maxtor	272
540mb (IDE) Conner	275
540mb/11ms (SCSI) Quantum	305
1.0 GB -10ms (SCSI) Fujitsu	625
1.0 GB - 13ms (SCCI) Quantum	620

VIDEO CARDS

Trident VGA-512/1MB (1024x768, 16bit)	$38/58
Diamond SpeedStar Pro ISA/VLB w/1MB	105/105
DiamondStealth 24VESA Local bus w/1MB	135
Diamond Stealth 32 VLB w/1MB/2MB DRAM	173/219
DiamondStealth Pro VRAM w/1MB/2MB	210/290
Diamond Viper VESA Localbus w/2MB	320
Diamond Viper PCI w/2MB	320
Diamond Stealth 32/64 PCI w/2m	205/320
SPiDER Tarantula PCI w/2MB/4MB	275/405
SPiDER 32VESA Local Bus w/1MB/2MB	88/138
SPiDER 32VLB Plus w/1MB/2MB	94/144
SPiDER BlackWidow Engine ISA 1M/2M	132/182
SPiDER BlackWidow+ PCI/VLB w/1MB/2MB	170/230
SPiDER 256 Cache VLB w/1MB/2MB	117/172
SPiDER 64 VLB/PCI w1MB/2MB/4MB	119/175/285
SPiDER 32 PCI w/1MB/2MB DRAM	135/190
SPiDER Pro VLB SVGA VIDEO w/IDE/I/O	99
Orchid Farenheit Localbus w/1MB	135
Orchid Kelvin VLB/PCI w/1MB/2MB	145/185
ATI Ultra Pro VLB/PCI/ISA w/2MB VRAM	240
ATI Mach 32 Ultra Plus VLB/ISA/PCI 2MB DRAM	175
ATI Mach 32 Ultra Pro EISA w/2MB VRAM	290
ATI Mach 64 Pro Turbo VLB/PCI/ISA w/2MB VRAM	320
ATI Mach 64 Pro Turbo VLB/PCI/ISA w/4MB VRAM	520
ATI Mach 64 Pro Turbo VLB/PCI/ISA w/2MB DRAM	235

(*) Come with 4MB-72Pin SIMM

MULTIMEDIA

Creative Lab Soundblaster 2.0	$60
Creative Lab Soundblaster Value Edition	79
Creative Lab SoundBlaster 16 Basic	104
Creative Lab SoundBlaster Pro 16 MCD	139
Creative Lab SoundBlaster Pro 16 MCD ASP	160
Creative Lab SoundBlaster 16 SCSI-II	169
Creative Lab SoundBlaster16SCSI-II ASP	197
Creative Lab SoundBlaster AWE 32	262
MEDIAVISION ProAudio Spectrum 16 OEM	100
Mitac16bit sound card+speakers+12games	100
Mitsumi double speed CD ROM (215ms)	130
SONY CD ROM 33A Double Speed	130
NEC triple speed 450KB OEM/Orig.(190ms)	350/430
NEC quadruple speed	445
TOSHIBA CD ROM 3401 (200ms) Internal	260
TOSHIBA CD ROM 3401 (200ms) External	370
Plextor CD ROM DM 3028 Internal	265
Plextor CD ROM External	365
Power Kit II:	
Panasonic single speed	
CDROM+SoundBlaster Pro + 5 CD Titles	215
Power Kit III:	
Panasonic double speed CDROM	
SoundBlaster Pro 16 + 7 CD Titles, MIC, Spkrs.	320

MONITORS

Nanao F550i 17"/F550iw	835 / 910
Nanao F560iw17"/T560i 17"	1160/1375
Nanao F760iw 21"/T660i 21"	1800/1960
NEC 3V/3FGE/4FGE	460/550/610
NEC 5FGE/5FGP/6FGP	960/1,085/1910
MAG MX15F/MX17F	440/790
MAG DX15F/DX17F (1280x1024, 0.26)	375/660
SONY CPD 17SEi 17"	915
SONY GDM 20SE/15SF	1,805/435
HITACHI CM-2095 20"/2087 20"	1,180/1,430
HITACHI CM-2198 21"	1,840
HITACHI CM-1586MV	400
HITACHI ACUVUE GX20/GX21	1480/1800
ViewSonic 4E/6E/14E	260/270/325
ViewSonic 15E/15/15EX	360/433/385
ViewSonic 17/17G/17E	880/779/710
ViewSonic 20/21	1,445/1,600
Mini Micro intrl (1024x768) Monitor 0.28	215
Mini Micro Non-interlaced Monitor 0.28	225
MITAC 15"/17" (1280x1024)	338/640

CONTROLLER CARDS

IDE w/I/O	$15
IO with 2s/1p/1g	12
IDE VESA Localbus	22
IDE VESA Localbus w/16550	45
PCI IDE/PCI SCSI-2 Controller	45/130
Promise IDE DC 200/4030VL	100/115
Promise 4020VL	105
Adaptec SCSI 1522	74
Adaptec SCSI 1542CF/1542CF w/Kit	170/240
Adaptec EISA SCSI 2742A/2742A w/Kit	275/340
Adaptec SCSI PCI 2940 w/Kit OEM	210
Adaptec SCSI 2842A-VL w/Kit Org.	260
SPiDER Pro 32 VLB IDE w/I/O and SVGA Video	99

PRINTERS

Panasonic KX-2123 II-HNV/NEW	196/250
Panasonic KX-P2124 II-HNV/NEW	275/330
Okidata 320/400E (Laser)	335/525
HP DeskJet 520/500C/560C	295/395/565
HP DeskJet 1200C/1200C Postscript	1420/2110
HP 4P/HP IV Plus/4MP	960/1390/1335
HP 4ML/4L/4M Plus	989/655/1920
HP 4SI/4SIMX	2870/4140

MISCELLANEOUS

Zotrix Fax Modem (9600/4800 F, 2400 M)	35
Zoltrix Fax Modem (9600 F, 2400 M)/Win	40
Zoltrix Fax Modem (14400 F, 14400 M)	69
US Robotics Fax/Modem 14,400	115
Microsoft compatible 3-Button mouse	10
Microsoft mouse serial/bus	30/55
Logitech Mouseman serial (4000dpi)	30
Logitech Mouseman Bus (4000dpi)	55
Q-tronic Trackball mouse	29
Colorado Tape backup DJ-10 120MB	98
Colorado Tape backup DJ-20 250MB	158
Colorado Trakker 120MB	210
Colorado Trakker 250MB	320
Baby AT/Mini Tower case w/230W PS	42
Medium Tower case w/230W PS	69
Full Tower case w/250W PS	83
Dual Floppy Drive 1.2+1.4MB	110
TEAC 1.2FD/1.44FD	42/38

KEYBOARDS

101 Enhanced keyboard	$18
Maxiswitch	28
Keytronics	30
Focus 2001/9000	36/60
Focus 6000/7000	26/49
Omnikey 101	65

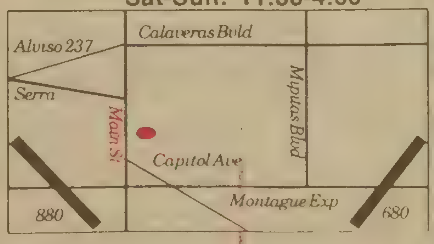
SPECIAL !!

SPiDER TARANTULA PCI w/2M

$275

- *Prices & availability subject to change w/o notice.
- *We accept VISA&Master Card.
- *Not responsible for typos.
- *Prices based on cash prices.
- *Company term on credit approval

424 S. Main Street
Milpitas, CA 95035
Tel. (408) 946 -7852
Fax.(408) 946-7892
Bus Hrs: Mon-Fri : 9:30-6:00
Sat-Sun: 11:30-4:00



WHY BUY FROM ANYONE ELSE...WHEN YOU CAN BUY FROM THE BEST–

UNIVERSAL COMPUTER PRODUCTS

FREE mouse pad with mouse purchase

1 YEAR PARTS/
1 YEAR LABOR
WARRANTY
ON ALL
SYSTEMS

486 Computer System

- 4MB RAM
- 1.2MB & 1.44MB Floppy Drives
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Keyboard
- 340MB IDE Hard Drive
- SVGA Card w/1MB
- 14" SVGA Monitor (.28 dp)
- Mini Tower or Desktop Case
- MS-DOS 6.2

DX-33 .....$1225
DX2-66..... 1275

386 Computer System

- 4MB RAM
- 1.2MB & 1.44MB Floppy Drives
- 2 Serial, 1 Parallel, 1 Game Port
- 101 Keyboard
- 200MB IDE Hard Drive
- SVGA Card
- 14" SVGA Monitor
- Mini-Tower or Desktop Case
- MS-DOS 6.2

DX-40
$1000

SX-25 or SX-33
$850

REPAIR & UPGRADE SERVICES

ON IBM & IBM COMPATIBLES

- FULL SERVICE
- NO APPOINTMENT NECESSARY
- SAME DAY TURNAROUND
- COMPETITIVE RATES
- EXPERIENCED TECHNICIAN FOR OVER 7 YEARS
- COURTEOUS SERVICE

ADD ON BOARDS

AT I/O Card 2S,1P,1G	$20
Mono Graphic/Printer	$20
IDE Dual HD/FD Cont	$20
SCSI 1:1 HD/FD Cont	$99
VGA Card w/256K	$40
Trident SVGA w/1MB	$70
C-Logic VLB SVGA w/1MB	$90
NCL 538 Controller	$50
NCL 539 Controller	$50
SMC Combo Ethernet Card	$119

CASES AND POWER SUPPLY

Baby AT w/250 Power	$70
Baby Tower w/250 Power	$70
Mid Tower w/250 Power	$90
Full Tower w/280 Power	$160
250W Power Supply	$60
200W Power Supply	$60
230W Power Supply	$60

DRIVES

Frame for 3.5" Hard & Floppy Drive	$5
CONNER	
CFS 210A 200MB IDE Hard Drive	$190
CFS 340A 340MB IDE Hard Drive	$220
CFS 420A 420MB IDE Hard Drive	$250
CFS 540A 540MB IDE Hard Drive	$320
MAXTOR	
MXT-7171A 170MB IDE Hard Drive	$180
MXT-345A 345MB IDE Hard Drive	$220
MXT-7405A 405MB IDE Hard Drive	$260
MXT-7546A 540MB IDE Hard Drive	$330
MXT-7345S 345MB IDE Hard Drive	$260
TEAC	
1.2MB 5.25"	$52
1.44MB 3.5"	$50

MODEMS

Mitac 2400/9600 Int. Fax Modem	$50
Mitac 14,400 External Modem	$149
US ROBOTIC 14,400 Int. Fax Modem	$119
US ROBOTIC 14,400 Ext. Fax Modem	$159
US ROBOTIC 14,400 Int. Modem	$110
US ROBOTIC 14,400 Ext. Modem	$149

Bundle Specials!

CD-ROM

Panasonic 562 AT BUS
- Sound Blaster Pro Deluxe
- Kings Quest
- Mother Goose
- Family Choice
- Dictionary of the Living World
- Speakers

$399

Sony CDU33A
- Sound Blaster 16 Multi CD
- Battle Chess
- Mother Goose
- US Atlas & Automap
- Mavis Beacon Teaches Typing
- Speakers

$360

Double Speed Int. CD ROM Drive	$155
Sound Blaster Pro Deluxe	$89.95
Sound Blaster 16 Basic	$109
Sound Blaster Multi CD	$149
Sound Blaster 16 SCSI-2	$179
MIDI Kit	$49

Mitsumi 101 Keyboard	$35
Chicony KB5311 Keyboard	$26
Chicony KB5181 Click Keyboard	$40
Focus 2001 Click Keyboard	$45
Focus 7000P Keyboard w/Trackball	$48

MEMORY CHIPS

DRAM	
256K-8/10	$1.25
256Kx4-8	$5.50
64K-10	$1
SIMM	
4MB x9-7	CALL
1MBx9-7/8	CALL
1MBx3-7/8	CALL
SIPP	
1MBx9-8	CALL
256Kx9-8	CALL

MONITORS

14" Monochrome	$105
14" SVGA Monitor 1024x768 .28dp	$230
14" SVGA Monitor 1024x768 .39dp	$200
14" SVGA Monitor 1024x768 .28dp NI	$250
15" SVGA Monitor 1280x1024 .28dp NI	$339/359
17" SVGA Monitor 1280x1024 .28dp NI	$CALL

MOTHERBOARDS

386 SX 25MHz Motherboard	$85
386 DX 33MHz Motherboard	$130
386 DX 40MHz Motherboard	$140
486 DX2 66MHz Local Bus Motherboard	$CALL
486 DX 33MHz Local Bus MB	$CALL
586 Pentium 60MHz MB	$CALL
586 Pentium 90MHz MB	$CALL

PRINTERS

Citizen 190GX (9 Pin)	$175
Citizen GSX230 (24 Pin)	$239
Citizen GSX240 (24 Pin)	$299
Citizen Color Upgrade Kit	$49
Panasonic 2180 (9 Pin)	$169
Panasonic 2123 (24 Pin)	$239
Panasonic 2124 (24 Pin)	$319
Panasonic 4410 Laser	$520
Toner KX-P450	$37
Toner KX-P453	$35.95
Toner KX-P451	$39.95
HP 51604A	$11.95
HP 51608A	$19.95
HP 92261A	$11.95
HP 92275A	$63.95
HP 92295A	$77.95
HP 92298A	$105

TAPE BACKUP

Colorado 120MB/250MB	$129/179
External Kit for Colorado Drive	$110
Colorado Jumbo Trakker 250 MB	$330

MOUSES

Trackball	$69
Logitech Serial Mouseman	$55
Microsoft Bus Mouse	$89
Microsoft Serial Mouse	$40
DEXXA Mouse w/Windows 3.1	$69
DEXXA Mouse	$25
Mouse Systems A3 Mouse for Mac	$50
Mouse Systems A3 Trackball for Mac	$50

PRINTER RIBBONS & DATA CARTRIDGES ARE AVAILABLE
COAX & TWISTED CABLES ARE AVAILABLE

UNIVERSAL COMPUTER PRODUCTS

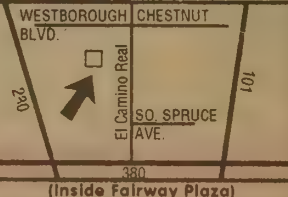
951 El Camino Real, South San Francisco, CA 94080
(415) 583-9736 Fax (415) 583-3457
Mon.-Fri.: 9am-6pm Sat: 10am-5pm

VISA

DISCOVER

NO SURCHARGE
ON CREDIT CARDS

Prices subject to change w/o notice • Not responsible for misprints



(Inside Fairway Plaza)

GREAT PRICES & LIFETIME LABOR WARRANTY ON ALL OUR SYSTEMS!

PCI/VESA
PENTIUM 100/90/66 LOCAL BUS
Complete System

SUPER PENTIUM 100MHz.....CALL
SUPER PENTIUM 90MHz......$2649
SUPER PENTIUM 66MHz......$2379

- 100/90/66 MHz INTEL Pentium CPU w/Cooling Fan
- 64 Bit 4 PCI/2 VL Motherboard (Made In USA)
- 16KB Internal Cache, 256KB External Cache
- Opti Chip Set, Flash AMI BIOS
- GREEN PC Technology, Power Saving
- 8 MB (70ns) Memory Up to 128MB On Board
- Conner 540 MB (10ms) IDE Hard Drive
- TEAC 1.2 MB & 1.44 MB Floppy Drive
- PCI IDE 4FD/2HD Controller
- 2 High Speed FIFO (16C552) Serial Ports
- 1 High Speed FIFO Parallel
- DIAMOND VIPER PCI SVGA w/2MB VRAM
- ADI 4G 15" NI Flat Screen Monitor
- Keytronics 101 Keyboard
- Full Tower Case w/250W Power Supply
- Microsoft (400DPI) Serial Mouse

PCI
PENTIUM 66 LOCAL BUS
Complete System

BIOTEC PENTIUM 66MHZ ... $1999

- 66 MHZ INTEL Pentium CPU w/cooling Fan
- 64 Bit 3 PCI Motherboard (2 Year Warranty)
- 16KB Internal Cache, 256KB External Cache
- INTEL Chip Set, Flash AWARD BIOS
- 8 MB (60ns) Memory Up To 128MB on Board
- 250 MB IDE Hard Drive
- 1.44 MB 3 1.2" Floppy Drive
- PCI IDE 2FD/2HD Controller
- 2 Serial Ports, 1 Parallel Ports
- ORCHID KELVIN 64 PCI SVGA w/1 MB DRAM
- VIEWSONIC 6E NI Full Screen Monitor (1024x768, .28 dp)
- Keytronics 101 Keyboard
- Med. Tower Case w/230W Power Supply
- Microsoft Ergonomical (400dpi) Mouse

PCI
PENTIUM 60 LOCAL BUS
Complete System

PENTIUM 60 MHz $1899

- 60 MHz INTEL Pentium CPU w/Cooling Fan
- 64 Bit PCI Motherboard Made by INTEL
- 16K Internal Cache, 256K External Cache
- INTEL Mercury Chip Set, Flash AMI BIOS
- 8 MB (70ns) Memory Up To 128 MB On Board
- 340 MB (12ms) IDE Hard Drive.
- 1.44 MB 3.5" Floppy Drive
- PCI IDE TYPE F DMA Controller on Board
- 2 High Speed FIFO (16C552) Serial Ports
- 1 High Speed FIFO Parallel Port
- PARADISE PCI SVGA Card w/1 MB DRAM (Winmark 10.6)
- CTX 14" (70Hz) NI Full Screen Monitor (1024x768) .28dp, 2 Year Warranty
- Keytronics 101 Keyboard
- Med Tower Case w/230W Power Supply
- Microsoft (400 dpi) Serial Mouse

Multimedia Family Pack Upgrade

BUY ANY SYSTEM FROM US AND GET:

1) PANASONIC Internal CD-ROM (DOUBLE SPEED, 300KB/s, 280ms)
2) SOUND BLASTER PRO DELUXE Sound Card
3) LABTEC Amplified Computer Speaker System (w/Battery)
4) FIVE CD SOFTWARE TITLES
   a) COMPTON'S Interactive Encyclopedia (Windows)
   b) Dictionary Of The Living World (Windows)
   c) MAYO CLINIC Family Health Book (Windows)
   d) KODAK Photo CD Access (Windows)

ONLY FOR **$319**

INSTALLED FREE!

DOS 6.21 (W/SYS)	$42
WINDOWS 3.11 (W.SYS)	48
PFS: WINDOWS WORKS	29
QUICKEN FOR WINDOWS	12
GVC 96/24 FAX/DATA INT MODEM (w/WINFAX Lite, Compuserve Starter Kit)	45
GVC 14.4 FAX/DATA INT MODEM (w/WINFAX Lite, Compuserve Starter Kit)	99
MADGE 16 Bit AT Token Ring Card	495
3COM 16 Bit Etherlink II Card	95
EPSON FX-870 (380CPS) PRINTER	270

MOTHERBOARDS
VESA Local Bus w/CPU

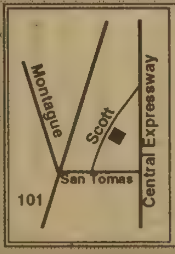
486DX2-66 (INTEL) MHz 256K cache	$310
486DX-50 (INTEL) MHz 256K cache	$445
486DX2-50 (INTEL) MHz 256K cache	$350
486DX-40 (INTEL) MHz 256K cache	$240
486DX-33 (INTEL) MHz 256K cache	$300
486SX-33 (INTEL) MHz 256K cache	$185
486SLC-66 IBM MHz 64K cache	$230

VESA
486 Local Bus
Complete System

486DX4-100 (Intel) 256K Cache	$1507
486DX2-66 (Intel) 256K Cache	$1117
486DX2-66 (AMD) 256K Cache	$1057
486SLC-66 (IBM) 64K Cache	$1007
486DX-33 (Intel) 256K Cache	$1057
486DX-40 (AMD) 256K Cache	$1017
486DX-33 (Cyrix) 256K Cache	$1017
486SX-33 (Intel) 256K Cache	$967

- Green PC Technology
- CPU WITH Motherboard
- AMI BIOS/CLOCK/CALENDAR
- 3 VESA Local Bus Slots
- 4 MB (70ns) Memory
- 1.2 or 1.44 MB Floppy Drives
- 250MB Hard Drive
- VLB 32-Bit IDE 2FD/2HD Controller w/2S/1P/1G Ports
- VLB 32-Bit SVGA Card w/1 MB DRAM, Windows Accelerator
- 14" NI SVGA Monitor (1024x768, .28dp)
- 101 Enhanced Keyboard
- Mini Tower w/230W Power Supply
- Microsoft Compatible Serial Mouse

LIFETIME LABOR WARRANTY ON SYSTEMS & 1 YEAR PARTS WARRANTY



C&J COMPUTERS, INC.
3036 SCOTT BLVD,
SANTA CLARA, CA
95054
FAX (408) 727-1209

C&J COMPUTERS, INC.

"Quality Systems Since 1989"

(408) 727-0788

- System upgrade available
- Prices subject to change w/o notice
- Corporate, Education, Gov't PO's Welcome
- All trademarks belong to their respective owners
- We are not responsible for typographic errors

• DEALER INQUIRIES WELCOME •
MON-FRI 9:30-6pm SAT 10-4pm

ASA COMPUTERS, INC

National: (800) REAL-PCs (800) 732-5727
Silicon Valley, CA: (408) PCs-FOR-U (408) 727-3678
Pleasant Hill, CA: (510) 256 - 9938
Fax Orders and Enquiries: (408) 988 - 0359
Technical Support (408) 496 - 6853 Ex 215 Mon - Fri Only 9 - 5
Hours: Mon - Fri 9 - 6:00; Sat 11 - 4
2354 Calle Del Mundo, Santa Clara, CA 95054

Student/Home Multi-Media System

i486sx-25
Mini-Tower Case
4 MB RAM
IDE w/2SPG
1.44 MB FDD
DY 126 HDD
Trident 8900C/D 1 MB
14" SVGA .28 NI Monitor
Double Speed CD-ROM
SoundBlaster C Card
Speakers, Microphone
JoyStick
Educational I CD Bundle
KeyBoard, Mouse
MS DOS 6.21, WIN 3.11

$1,059

THE ROADRUNNER PCs - Value, Performance, Compatibility

System Pricing		BareBone:	Complete Systems					
TYPE OF SYSTEM	BUS Structure	Motherboard Mini-Tower Case IDE w/2SPG 1.44 FDD 101 K/B Serial Mouse	BareBone + 1 MB RAM SCSI 40MB HDD 14" Mono MGP Card	BareBone + 4 MB RAM IDE 126 MB 14" Mono SVGA SVGA 512K Card	BareBone + 4 MB RAM IDE 213 MB HDD 14" SVGA .39 SVGA 1MB Card	BareBone + 8 MB RAM IDE 270 MB HDD 14" SVGA .28 SVGA 1MB Card +1.2 Floppy	BareBone + 8 MB RAM IDE 425 MB HDD 14" SVGA .28 NI SVGA 1MB Card +1.2 Floppy	BareBone + 8 MB RAM IDE 540 MB HDD 15" UVGA .28 NI SVGA 1MB Card +1.2 Floppy
Pentium* 90 w/512K	PCI, VLB	$1,217					$2,088	$2,244
Pentium* 66 w/256K	PCI, ISA	$1,017					$1,888	$2,044
Pentium* 60 w/256k	PCI, ISA	$883				$1,726	$1,754	$1,909
i486DX4-100 w/256K	VLB	$843				$1,660	$1,688	$1,844
A486DX2-66 w/256K	VLB	$425			$996	$1,242	$1,270	$1,426
C486DX-33 w/256K	VLB	$325			$895	$1,142	$1,170	
I486SLC2-66 w/64K	VLB	$306		$699	$868	$1,106	$1,134	
i486SX-33 w/128K	ISA	$265		$665	$817	$1,059		
i486SX-25	ISA	$227	$468	$626	$778			
A386DX-40 w/128K	ISA	$197	$439	$597	$749			
A386SX-40	ISA	$162	$404	$562				

PCI Systems include PCI IDE Controller and TSENG W32 1MB PCI Graphic Card

VLB Systems include VLB IDE Controller and Cirrus Logic 5428 1MB VLB Graphic Card

CPUs: A - AMD; C - Cyrix; I - IBM; i - Intel

* *Intel Pentium CPU based Systems*

Bay Area On-Site Service Available

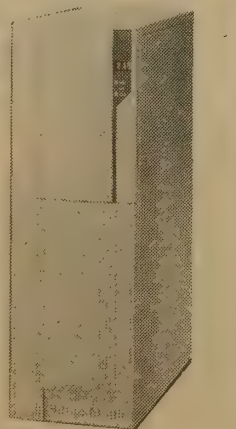
Business/Professional Multi-Media System

A486DX2-66 w/256K VLB
Compact Med-Tower Case
8 MB RAM
IDE w/2SPG VLB
1.44 MB FDD
212 MB HDD
CL5428 1 MB VLB
15" 1280 x 1024 .28 NI
Double Speed CD-ROM
Pro Audio Spectrum 16
LabTec Speakers
KeyTronic K/B
LogiTech Mouse
MS DOS 6.21, WIN 3.11

$1,564

ASA... ...Proven Systems for all Applications

The Thoroughbred Workstations



Hardware platform for Multiple Operating Systems... and Applications demanding Workstation Power... AutoCad, P-CAD, Windows NT

The THOROUGHBRED Workstations - Top-of-the-Line - Power, Functionality, Price

ARCHITECTURE	UMC(cs) - Intel	UMC(cs) - Intel	Intel(cs) - Intel	Intel(cs) - Intel	Intel(cs) - Intel	MIPS*
Motherboard	MustangS	MustangSZ	CapricornI	CapricornI	CapricornS	SH-RISC
CPU	Intel 486DX2-66	Intel 486DX4-100	Intel Pentium 60 Mhz	Intel Pentium 66 Mhz	Intel Pentium 90 Mhz	MIPS R4450 - 150
CPU Power Est. (Mips)	21	42	42	42	60	75
Cache	256K - 512K	256K - 512K	256K	512K	512K	512K - 2MB
RAM	16MB - 128MB	16MB - 64MB	16MB - 96MB	16MB - 160MB	16MB - 128MB	16MB - 256MB
Hard Drive	700MB SCSI-II	700MB SCSI-II	700MB SCSI-II	1.08GB 9.5ms SCSI-II	1.08GB 9.5ms SCSI-II	1.08GB 9.5ms SCSI-II
Drive Controller	Adaptec VLB SCSI-2	Adaptec VLB SCSI-2	Adaptec PCI SCSI-2	Adaptec PCI SCSI-2	Adaptec PCI SCSI-2	32 Bit SCSI-2 Built-in
I/O	(2) 16550 S, P	(2) 16550 S, P	(2) 16550 S, P	(2) 16550 S, P	(2) 16550 S, P	(2) 16550 S, P
Video Card	S3-805 VLB	S3-805 VLB	S3-864 PCI	S3-864 PCI	S3-864 PCI	GUI S3 1MB - 2MB
Monitor	15" .28 1280x1024NI	15" .28 1280x1024NI	15" .28 1280x1024NI	17" .26 1280x1024NI	17" .26 1280x1024NI	17" .26 1280x1024NI
Operating System	MS DOS, WFW 3.11	MS DOS, WFW 3.11	MS DOS, WFW 3.11	MS DOS, WFW 3.11	MS DOS, WFW 3.11	MS DOS, WFW 3.11
Case	SuperT w/300W PS	SuperT w/300W PS	SuperT w/300W PS	SuperT w/300W PS	SuperT w/300W PS	SuperT w/300W PS
Price	$2,354	$2,758	$2,817	$3,618	$3,819	$4,775

WorkStations Include: 1.2 and 1.44 MB Floppy Drives, KeyTronic KeyBoard, Logitech Serial Mouse

*Please ask for list of ported Applications

The Thoroughbred Servers

Outstanding Price Performance and Functionality for Application and Networking Servers

MOTHERBOARDS & CONTROLLERS

ISA/EISA MOTHERBOARDS

286-12/20	**$35/50**
386SX-40	**$57**

THE STALLION SERIES

ISA 386DX-40 w/64,128k	**$89**
ISA 486SX-25	**$119**
486DLC-40 w/128K	**$124**
ISA 486SX33 128K	**$155**
ISA 486DX-33 256k C/AMD/Intel	**$205/225/299**
ISA 486DX-40 256k Cyrix/AMD	**$215/248**
ISA 486DX-50 256K Cyrix/Intel	**$245/369**
ISA486DX2-50 256k C/AMD/Intel	**$257/289/349**
ISA 486DX2-66 w/256k AMD/Intel	**$345/367**
EISA 486DX-50 w/256k	**$512**

VLB/PCI MOTHERBOARDS

486/P24T

MustangF 486SX-25 ISA/VESA	**$171**
MatngS 486DX-33 256C/AMD/Intel	**$215/235/309**
MustangS486DX-40 256K Cyx/AMD	**$225/256**
MustangS486DX-50 256k Cyx/Intel	**$255/379**
MustangS 486DX2-50w/256K Cyrix/AMD/Intel	**$256/289/329**
MustangS 486DX2-66 256K AMD/Intel	**$319/345**
IBM Alaris 486SLC2-66 w/Math-Co	**$213**
IBM BlueLightng 486BL3-75 w/Math-Co	**$325**
Micronix 486-33/50/66	**$485/561/524**
AMI SVoyager 486-33/50/66 Intel	**$553/628/591**
Pegasus N 486-33/50/66 Eisa/Vesa	$435/510/473
Micronix 486-33/50/66 Eisa/Vesa	$765/841/804
AMI Ent IV 486-33/50/66 Eisa/Vesa	$670/745/708

Intel PENTIUM and DX-4

MustangS4 486DX4-75/100 256K	**$630/774**
CapricornS 512K 60/66 VLB	**$714/860**
CapricornI 256K PCI/VLB 60/66 Mhz	**$798/944**
CapricornS 512K PCI/VLB 60/66	**$815/960**
CapricornS 512 PCI/VLB 90Mhz	$1183
PegasusA PCI/EISA 256K 60/66	**$944/1089**

ISA/EISA CONTROLLERS

IDE/MFM/RLL & FAST I/Os

Mustang IDE 2FD-2HD/4FD-2HD	**$14/28**
Mustang IDE w/ 2SPG	**$15**
Promise IDE Caching DC200 2FD/4HD	**$97**
FAST-PIG IDE,IO/IO w/16C550 Uarts	**$40/30**
ULTRA-IO 4S/2P 4 16C550 Bi-Dir	$96

SCSI

Future Domain Compatible16 bit	**$49**
Trantor SCSI Adapter T-130	**$52**
ADAP 1522 16BIT Card/Kit	**$70/139**
ADAP 1542C Card/Kit	**$170/250**
ADAP 1542C+ Kit (w/Corel SCSI)	**$317**
ADAP 1742 EISA	**$369**
ADAP 2742 EISA Fast SCSI2 C/K	**$304/357**
Bus Logic BT747S/KT 747S	$286/299
DTC3290AS 7HD&4FD Caching	$441
Future Domain TMC1680 SCSI II C/K	$146/203
AMI EISA SCSI II Caching wo/w pwrpk	$373/410
DPT Smart Cache3 EISA SCSI	$331
Mylex DCE EISA SCSI Caching Ctlr**	$228
Trantor348 Parallel Port to SCSI	$149

VLB/PCI CONTROLLERS

IDE

Mustang IDE-IO VLB/PCI	**$22/33**
MustangP IDE w/Fast IO w/OS2 Drivers	**$49**
MustangP 420 w/512k IDE/IO	**$106**
MustangW 2008 2HD/4FD/2S/1P/2.88	**$44**
MustangW 2018 2HD/4FD/2S(16550)/1P 2.88	**$50**
DTC 2277 IDE Caching	$105
DTC 2278 IDE/IO	$29
Promise DC-4030 4HD/2FD Caching	**$109**

SCSI

DTC 3270 SCSI I	**$109**
BusLogic BT445S Fast SCSI-II	$194
AMI SCSI II Caching w/wo pwrpk	$373/410
ADAPTEC 2842 SCSI II Kit	**$240**
BusLogic KT946S SCSI-2 PCI Kit	$269
Adaptec 2940 PCI Kit	**$284**
National SCSI PCI Controller	$86

RAID Controllers in Networking Section

Cases - Power Supplies - KeyBoards - Mice

ROADRUNNER SERIES

Baby Desk/Mini Tower w/PS	**$43/39**
Medium Tower w/PS Compact/Regular	**$47/63**
Full Tower(230W)/Big Tower(300W)	**$72/170**
Rack Mount W/PS	**$290**

DIAMOND SERIES (For Black add $5)

Baby Desk/Mini Tower w/PS	**$71**
Medium Tower Slim/Thick w/PS	**$81/93**
Full Tower w/PS	$103
File Server w/ 400W PS, 3 Fans 12 F/HDD	**$371**

External HDD/CD-ROM Cases

1HH w/PS 3.5"/5.25"	**$65/73**
1FH(2HH)/2FH(3HH) w/PS	$91/132
Removable IDE Chasis & Carrier	**$37**
SCSI Cables Int/Ext	**$10/11**

For Un-Interruptible Power Supplies see UPS's in Networking Section

KEYBOARDS AND MICE

Regular/Spill-Resistant 101	$16/17
MaxiSwitch/KeyTronic	$24/27
Small 11.5" 88 Keys/BLACK 101	**$31**
Russian Keyboard	**$20**
Japanese Keyboard, 106 Keys	**$59**
SEJIN J-Mouse (mouse under 'J' Key)	**$95**

Also line of European/Arabic KBs

S-Mouse/TBall	$8/20
LogiTech Ser/Bus bulk	$17/39
LogiTech Mouseman Cordless	$82
Microsoft white box S/B	$24/54
BLACK SERIAL	**$16**

POWER SUPPLIES

PS2 200/230/300W	$34/40/51
PS2 200W GREEN PC	**$44**
Full Tower 230/300/400W	$49/63/126

MASS STORAGE PRODUCTS

FlOPPY DRIVES

YE Data 1.2/1.44MB	**$43/35**
Teac 1.2/1.44MB	**$49/38**
Teac Dual Floppy 1.2 + 1.44 MB	**$102**
Teac 2.88 MB	**$99**

HARD DRIVES

2.5" NOTEBOOK DRIVES

QUN 127 /256MB 16msec	$225/339

IDE

(Hard drive prices change often-please call)

Dae Young 120 (Manufacture warranty)	**$129**
MXTR/QTM 170MB 17 msec	$155/169
CON 210 14msec	**$165**
CON/WD 250MB 14msec	$212
QTM 270/MXT 245MB 15ms.	**$196/200**
WD 340/MXT 340MB 12/14 ms	$204/$193
CON/QTM 340MB	$212
CON 420MB	**$208**
WD 425MB 13msec	$227
QTM 540MB 11msec	**$298**
WD 540 12msec	$304
MXTR 540 8.5/12 msec	**$339/285**
CON 540MB 12msec	$289
CON 1.0 GB	$576
MICROPOLIS 1/1.8GB 10ms	$699/925

SCSI - 3.5"

QTM 42MB SCSI	$69
CON/QTM 170MB 17msec	$189
CON 212MB 12 msec	$202
MXTR 213	$202
MXT 290	$216
MXT 340MB 15 msec	$229
CON 340MB 13msec	$238
QUN 540MB FAST	**$315**
MXT 540MB /CON 540 8/12 ms	**$399**/404
Quantum 700	**$399**
QTM 1.4 GB 10msec 5 year	$760
DEC 1.07GB DSP3107 9ms	$757
DEC 1.6GB DSP3160 9ms	$986
Quantum 1.08 GB	**$629**
MICROPOLIS 1/1.8GB 10ms	$689/925
HP1.2GB 10.5msec	$779
ST1.2GB ST31200N 9 msec	**$710**
Quantum 2.1 GB	$1059
ST12400N ST2.1GB 9MS	$1199
DEC 2.1GB DSP3210 9ms	$1259
ST 15150N 4.29GB 8msec	$2539

SCSI - 5.25"

DEC 3.0GB DSP5300	$2046
DEC 3.5GB DSP 5350	$2312
DEC 4.0GB DSP 5400	$2488

SUPER HARD DRIVES

Seagate Barracuda 3.5" HH (8 msec avg. seek, 4.17 msec lat., 7200 RPM)

ST11950N/ST12550N 1.7/2.5 GB	$1265/1325

FLASH CARD HARD DRIVE

ST 75A 1.8" 5.2MB IDE<1.5MS	$484
ST 710/720A 1.8" 10.4/20.9MB	$888/1177
ST 740A 1.8" 41.9MB IDE<1.5ms	$2068

EXTERNAL HRD. DRV. SUBSYSTEM

FOR EXT. HARD DRIVE	ADD $99

TAPE DRIVES

(<500MB TAPE-BACKUPs)

Colorado 120 / 250MB	**$99/159**
Conner 250MB w/Cassette	**$144**
Colorado KE-10 External kit with card	**$105**
Colorado External port card	**$37**
FC-10 high perf card	**$85**
Colorado Trakker 250MB	**$329**
Archive Viper 250MB hh SCSI I/E	**$335/425**

(>500MB for PC / SERVER)

Viper 525MB hh SCSI Int/Ext 6MB/sec	$440/530
Mountain 2/4GB Filesafe Int Dat 4mm	$1629/1959
Archive 4320 NT 2.0GB DAT 3.5"	$826
Archive 4324RP 4.0GB DAT 3.5"	$856
Colorado 2.4 / 4.0 GB Qic 5.25	$929/1155
HP 2GB DAT 4mm Int/Ext	$862/952
HP 4-8GB DAT 4mm Int/Ext	$1080/1150
WANGDAT 3100 2.0GB 4mm Int/Ext	$902/1020
WangDAT 3200 4-8GB 4mm Int/Ext	$924/1035
EXABYTE 750MB HH MINI Int/Ext	$692/860
EXABYTE 8205 5GB HH Int/Ext	$1595/1695
EXABYTE 8505 10GB HH Int/Ext	$2140/2240

(above drives require special contr & soft drivers)

TAPE BACKUP DRIVERS

Novaback for DOS//OS/2	$65
Novanet Multiuser NLM	$279
ARC Serve Solo	$175
SYTOS for DOS/NOVELL, GEN	$120
Conner Backup Exec for Dos/Win v3.3	$79
Conner Backup Exec for Netware v3.1	$259

MAG/OPTICAL (Rewritable)

Ricoh 128MB 3.5" Internal	$532
Panasonic LF-7010 1GB 5.25	$2799
HP 1.3GB 5.25" SCSI-2 EXT	$2799
MAXOPTIC 1GB Tahiti IIM 35msec	$2260

REMOVABLE DRIVES

Syquest 44MB Dr.	$249
......W/Ext Case, Cables, Cart, Cont	$379
Syquest 88/105MB Dr.	$308/389
Bernoulli 44/99 Insider	$907/840
IDE: Upto 1GB removable kits	$39
SCSI: Upto 1GB Removable Kits	$138

DISKETTES & CARTRIDGES

Floppy 1.44 Bulk 20+/100+/500+	**$.49/.39/.34**
Floppy 1.2 Bulk	**$.44**
Tape DC2120 250MB..Formatted	**$16**
Tape DC 6250 5.25", 1/4" Cartridge	$25
Tape DC 6525 5.25", 1/4" Cartridge	$30
TK50 for DECs	$24
DAT 4mm 90 mtr HP/OEM	$20/14
DAT 8mm 112 mtr.	$14
Syquest 44/88/105MB Cart.	$62/94/85
Bernoulli 44MB/90MB 3Pk	$289/298/264
Mag-Opt 600MB/650MB 5.25" Rewrite	$86/86
Mag-Opt 1.2/1.3 GB Rewrite	$124/124
Mag-Opt 600/650MB WriteOnce	$86/86
Mag-Opt 1.2/1.3GB WriteOnce	$128/128
Mag-Opt 128MB 3.5"	$58
Mag-Opt 650/1.3GB WORM 5.25"	$160/193

VIDEO ADAPTERS & MONITORS

ISA/EISA ADAPTERS

MGP	$13
VGA 256k	$28
Trident 512K/1MB	$39/58
Tseng 1MB	$73
Mustang 1MB Window Accel	$58
Diamond Stealth 24	$137
Hercules Dynamite Pro 1/2MB	165/204
Hercules Graphite Pro 1/2MB	$274/418
ATI Ultra Grpx 1MB w/Mouse	$214
ATI Ultra 8514 1 MB VRAM(Dual mon. cap.)	**$176**
ATI Ultra Pro EISA 2MB	$316
AMI Fast View EISA VGA Graphics w/1MB	$221

VLB/PCI ADAPTERS

(wm = winmark ver2.5)

MustangVT Trident 1/2MB	**$69/114**
MustangVC Cirrus logic 5428 1/2MB	**$79/126**
MustangVS S3-805 1/2MB	**$89/134**
Spider 32 1MB/2MB,20 WM	**$95/139**
Spider 32 Plus 1MB	**$98**
DIAMOND Stealth 24vlb 1MB	**$129**
DIAMOND Viper 2MB,9000,50wm	**$322**
ORCHID Celsius 2MB	$266
ORCHID Kelvin 1/2MB	$139/176
Hercules Dynamite Pro 1/2MB	**172/225**
Hercules Graphite Pro 1/2MB	$274/418
ATI Ultra Pro 1MB DRAM	$137
ATI Ultra Pro 2MB, 26wm	$219
Cirrus Logic 5428 PCI 1/2MB	$126/171
S3-864 PCI 1MB	$139
Orchid Kelvin PCI 2MB	$176
Spider 64 PCI 1/4MB	$171/233
ATI VRAM 2MB PCI	$239
DIAMOND VIPER 2MB PCI	$338

CAD SPECIALITY ADAPTERS

NUMBER NINE - #9GXI/GXE

L10 ISA or VLB Retail/Bulk	$249/236
L11 ISA or VLB Retail/Bulk	$359/339
L12ISA&VLBRetail/Bulk	$420/406
L14 ISA&VLB Retail/Bulk	$649/599
L20/21 lite	$515/679
64 1MB/2MB....PCI or VLB	$185/255
64 PRO 2MB/4MB	$365/549

MATROX

MGA-VLB 2/Plus	$429/479
MGA-VLB 4/200	$865
MGA-IMP 3A&V	$715
MGA-PRO 4.5V/4.5+z buffer	$1119/1399
MB memory upgrade	$209
MGA-PCI 2/2Plus	$385/429
MGA-PCI 4/4-200	$744/968

METHEUS CORPORATION

Premier 928 VL2(1MB)/4(2MB)	$324/559
Premier 928 ISA 1M/2M/4M	$297/422/725
MODULE 1MB Memory	$119
1104 Plus 256 Hz, MultiDisplay	$1295

(We do not have the high end CAD adapters and monitors on display and carry only a few in stock - these are on Just-In-Time inventory basis - please place orders in advance-the prices in parenthesis are on a cash basis only)

9" - 14" MONITORS

MONO

Mono 14" amber/white	**$74**
Mono 14" SVGA	**$89**

VGA/SVGA

SVGA 14" 1024 x 768 .39	**$189**
SVGA 14" 1024 x 768 .28 Int	**$216**
SVGA 14" 1024 x 768 .28 NI	**$227**
Black SVGA 1024 x .28 I/NI	$270/282
Kanaka 14" Int/NI w/Hitachi Tube	**$233/256**
CTX 14" 1024 x 768 .28 Int.	**$247**
CTX 14" 1024 x 768 .28 NI	**$260**
Viewsonic 6E 14" .28 1024	**$**

CAD MONITORS

Miscellaneous

KFC15".28 1280x1024NI wo/w Digital	**$312/385**
Mitac 15" .28 1280 LowRad,Energy*	**$329**
KFC 17" .26 1280x1024 NI	**$729**
Sony 1604s OEM	$785
Mitac 17" .28 1280x NI	$649
Mitac 17" .26 1600x NI Energy* 3yr warnty	**$709**
Mitsubishi 15FS/17FS DiamScan	$498/1039
MAGNVX 15".28 1280XNI MPR2 digdisply	$355
MAGNVX20CM64 20", 1280, .31.($1110)	$1150

NANAO

F550iw17",.281280NI MPR2	($945) $998
T560iW 17",.25 1280NI, MPR2	($1185) $1250
T560I,.26 1280NI,MPR2	($1415)$1490
T660I 20",.30 1280NI MPR2	($1999) $2110
F760iw21".31,1280NI,MPR2	($1919) $2015

NSA-Hitachi

CM1797 17`.28.1280NI,MPRII	($975)$1099
CM2095 20" 1280 Anti Glare	($1239) $1295
CM2087 20" 1280 72Hz Mic	($1499) $1555
CM2187-515 21" .28 1280NI	($1709) $1795
CM 2188 21" .28 1280NI	($1950)$1989

Hitachi America - ACCUVUE

PS-20,.31dpi 1600x NI	($1555)$1618
PS-21,.28dpi 1600xNI	($2029)$2099
PS-21A,.28dpi 1600xNI	($2159)$2279

Sony

CPD1430s 14" 1024NI .25	($539)$555
CPD1730 OEM 1024NI .25	($828)$859
CPD 1730 Original 1024NI,.25	($945)$988
GDM17SE 17" 1600NI .25	($955)$999
GDM20SE 20"	($1886)$1959

Nokia

17" 447B Trin.25dpi,1280x	($927)$975
21"445M.26,1280NI	($1955)$2029
21"445X.26,1600NI	($2566)$2615

Sampo

Sampo KDM1767 17" .28	($668)$695
Sampo 1777 17" .28 Microp	($749)$785
Sampo 2055 20" .31	($1040)$1075
Sampo KDM2077 20" NI 1280 .31	($1460)$1520

NEC

CDR-400/500	$415/$465
CDR-600/900	$495/$965
3V/4FGE	$485/($635)$659
5FGE/FGP17".28,	($999)$1045/($1125)$1165
6FGP21",.28,1280NI	($2005)$2095

MAG

LX1564 OEM15" .28, 1280NI	**$399**
MX15F 15"MPR II	($459)/$477
DX15F 15"	$389
DX 17F 17" .26 1280x	($695)/$725
MX17F.17".26.1280NI.Mic Org	($798)/$835

Prices given in bold are usual stock items, prices not in bold are special order items and require a 20% deposit, are not returnable, and take 2-3 days lead time.

CASH COUPONS

MONITORS
MITAC 17"
.26 1600 NI
ENERGYSTAR
3 YEAR WARNTY
$679

MONITORS
K F C
15" .28 1280
$306

COMMUNICATIONS
2400MODEM..$24
96/24 F/M..........$35
14.4 INT F/M.....$59

COMMUNICATIONS
US ROBOTICS
14.4 F/M Int/Ext
5 YEAR/16550 UART
$105/126
(limited time, one per customer)

MOTHERBOARDS
486 DX VLB W/256K
DX-33 CYRIX...$220
66 AMD/INTEL.$340/360
100DX-4 INTEL.....$699

MOTHERBOARDS
PENTIUM
Capricorn series
60 Mhz PCI..$882
66 Mhz PCI/EISA.$1,146
90 Mhz PCI.........$1,173

ADAPTERS
CONTROLLERS
IO W/16550...$29
SCSI w/DRIVERS.....$49
ADAPTEC VLB SCSI..$229
ADAPTEC PCI SCSI...$279

ADAPTERS
VLB/PCI
CL 5428 1MB.........$79
HERCULES DYNA 1MB....$165
DIAMOND VIPER 2MB....$309
CL 5428 PCI 1MB............$120
ATI PCI 2MB.................$239

The MARKETPLACE

MULTI MEDIA

CD-ROMs

IDE TYPE CD-ROMs

CD-ROM-#1-of-the-Month
Mitsumi Kit 350msec, 150 KB/S.........$79

Panasonic 562 DblSpd.320ms, 300kb/sec.	**$143**
Mitsumi Dbl-Spd 250ms,300kb/sec	**$133**

Super Multi-Media Complete Kit on Sale!
Mitsumi CD-ROM, 150KB/sec, 350ms
8 bit Sound Blaster Compatible Card (for Win)
Quickshot Warrior joystick
Shielded PC speakers
Deluxe model microphone
Award winning Apogee sound-supported games; all for..................$138!!!

SCSI CD-ROMs

NEC 3X 510CDR Ext 195ms,450KB/sec	**$434**
NEC 3XP Portable 250ms,450KB/sec	$460

CD-ROM-#2-of-the-Month
NEC 3X CDR-510 Multispin,
195ms,450KBS....$339

TOSHIBA 3401B/E 200ms, 300kb/s I/E.	**$259/339**
TOSHIBA 4101 B/E 235ms,300Kb/sec Int	$210
Texel 3028/5028 240ms, 335kb/s I/E	**$259/339**
SONY CDV561, 295ms, 300kb/sec	$286
Future Domain SCSI CD-ROM Kit	$69

AUDIO CARDS & MPC KITS

Hyena Snd Blster Comp. 8bit Sound Card	**$39**
Hyena w/ Speaker, Joystck, mcrphn, game.	**$50**

MEDIA VISION

Pro Audio 16 Basic	**$58**
Pro Audio Spectrum 16 w/scsi	**$97**
Pro Audio Studio 16/Power Pack	$199/69
Fusion Double CD16 Kit Int/Ext	$475/495
Pro 16 Multi-Media System/II	$609/764
Pro Movie Spectrum/Studio II	$279/309

CREATIVE LABS

Sound Blaster Deluxe 8bit	$67
Discovery 8/16 Upgd. Kit	$369/429
SoundBlaster 16 Basic/SCSI 2	**$102/144**
SoundBlaster 16 ASP SCSI/MCD	**$202/171**
Sound Blaster Voice Editor	$55
Wave/Video Blaster	$179/305

MISC MULTI-MEDIA PRODUCTS

Encyl 1:Encyl,Animals,World/US Atlas.	**$39**
Educational 1 plus Family health	**$68**
Joystick	**$15**
Logitech Fotoman Digital Camera for PC	$465
Logitech SoundMan 16	$109
Intel Smart Video Recorder	$520
Cardinal Tech Digtl Sound Pro 16/Plu	$145/186
Video Logic Captivator Kit win3.1	$369
Midi Mate/CDPC XL	$49/1059

PLOTTERS, DIGITIZERS, SCANNERS & PRINTERS

PLOTTERS

HOUSTON INSTRUMENTS

V50 INKJET A-C,2MB BUFFER	$1298
HiPlot 7100 A-D 8 pen,LCD display	$2575
HiPlot 7200 A-E 8 pen,LCD display	$3395
DMP-162R A-E, 8 Pen, Roll Feed	$3958

DIGITIZERS

SUMMAGRAPHICS

III 12x12 w/16btn or 4bt & Pen	$312
III 12x18 w/16btn or 4bt & Pen	$539

KURTA

XLP 12x12 w/4btn & Pen	$225
XLP 12x18 w/16btn or 4btn & Pen	$429
XGT 12x12 w/4Btn	$322
XLC 36x48 w/16btn or 4btn&pen	$1520

CALCOMP

CALCOMP 12 X 12/12 x 18	$299/618
CALCOMP 18 X 24/24x36	$1275/1399

SCANNERS

LOGITECH (HAND-HELD)

SCANMAN-color Phototouch/OmniPg	$347/398
SCANMAN 256GS wo/ w OmniPage	$153/195
SCANMAN 32GS w/ OmniPage	$113
Scanman Power Page Slide	$404

MICROTEK

Scanmaker II/IIXE 1200/600dpi w/OCR	$521/907
Scan-In-Dex Business card scanner	$275
Scanmaker IIG/IISP color cap 600dpi	$392/790

MUSTEK (Hand-held)

ScanMagic256,400dpiw/perceive	$109
ScanMagic Color,400dpi,256 grays w/perc	$202
GrayArtist,800dpi,256 grays w/perc	$134
Colorartist Pro,800dpi,256&colr w/per	$307

MUSTEK (Flatbed)

Paragon 600(dpi)24 bitclr,Photoshop	$605
Paragon1200(dpi)24 bitclr,Photoshop	$997

UMAX Technologies

UC 630 PC,1200dpi max,24bit /256gray	$701
UC840,1600dpi max,16.8 million clrs	$928
UC1260,2400dpi max,16.8 million clrs	$1232
UC1200SE,2400dpi max.,30 bitclrs	$2634

Hewlett Packard

HP IICX Color scanner	$989

EPSON

ActionScanning 300/ES 800C	$818/827

Miscellaneous

Info 3gs 300dpi sheet fed	$375
Info SF-6C 600dpi sheet fed	$450
LeoScan 610 sheet feed,300dpi/256 gray	$599
Westbrook File Majic OCR for scanners	$285
Relysis 9600 800dpi color flatbed	$2995
Tamarack 6000/8000C	$729/853

Fujitsu (Flatbed)

M3096E/G 11.7x17"400dpi 20ppm	**$4222/4894**

PRINTERS

Miscellaneous

Star Micrnix NX1001 9 Pin.120/220V	$134/144
Star Micronix 220v quantity of 100 only	$135
IGOR 132 9Pin Wide 220V (Cyri..).in stock ......with any purchase	$110

EPSON

Action 2250 9 pin,50sheet,240cps	$133
LQ570+ 24 pin wide, 269 cps, 11 fonts	$249
LQ 1070+ 24 pin Wide,252cps,11fts	$369
LQ 1170 24Pin ,2 resident fonts	$609
Stylus 300 Inkjet 360dpi,150cps	$221
Stylus 800 Inkjet 360dpi,150cps,100sht	$283
ActionLaser 1500 300dpi,6ppm,1mb	$655
Actionlaser 1600 600dpi/Stylus color	$947/565
DFX-5000 9pin,wide, high spd. 533cps	$1485
DFX-8000 9pin, wide high spd1066cps	$2345

CANON

BJ200e230,360dpi,49k,7fnts,4ppm	$295/395
BJ10SX,110cps,360dpi,**Portable**	$241
BJC 600 Color,240cps,360dpi,100shtfd	$579
BJC 820 Color,240cps,4ppm,1MB	$1467

OKIDATA

OL 380/321 dotmatrix,24Pin,23K	$217/420
OL400e/410elaser 4ppm, 300dpi	$499/635
OL810, 8ppm, 300dpi	$875
OL830 Plus/850, 8ppm w/ 2MB ps	$1055/1165
OKI ML520/521 9 pin 64K	$359/475
OKI ML590/591 24 pin..auto form	$417/561

PANASONIC

KX-P2124, N-Carr, 320cps, 360dpi, 12fnts	$318
KX-P2624/2023	$381/197
KX-P1624, W-Carr, 192cps, 360dpi, 14fnts	$383
KX-P4410,5ppm,300dpi,28fnts,512k	$529
KX-P4450i/4430	$951/655

CITIZEN

GSX 145 24Pin wide,160cps,360dpi	$349
GSX200 9pin,Narr/wide	$168/289
GSX220 24pin/CTZ projectII 3ppm	$179/279
GSX230 24 pin.8 fonts, 270cps	$221
(color option for Citizen 80 col printers	*$45)*
GSX240 24 pin 300cps, 13 fonts	$281
Notebooks CTZPN48/CTZNP-IBM	$284/326

HEWLETT PACKARD

Deskjet 520 300dpi,120cps,16k	$289
Deskjet 500C Color 300dpi,167cps 16k	$385
Deskjet 560C Color,3ppm,300dpi,80k	$553
Deskjet 1200C/ps Color2MB	$1375/2079
HP 4+/4P/4SI/4L	$1375/935/2835/637
4M+/4ML/4MP/4 SiMX	$1875/971/1350/4185

NEC

Pinwriter3300 24pin wide,360dpi,80K	$326
Pinwriter6200 24pin narrow,360dpi,80k	$399
Pinwriter9300 24pin wide.360dpi 333draft	$839
Silentwriter superscript610,6ppm,256k	$471
Silentwriter1097 600dpi,7mb	$1365

FUJITSU

10/10W Laser,10ppm,1/2mb 14/35fts	$830/942

All printers: Cash basis only and come with the Original Manufacturer's warranty. Please call for lead time. No returns on any printer purchase with this pricing.

MEMORIES, MATH-COs & CPUs

MEMORIES for IBMs

SIMMs

256 x 9 (3 chip)-70NS	**$12**
1M x 9 (3 chip)-70 Major brand	**$39**
1M x 9 (3 chip)-70NS IBM original	**$36.5**
1Mx9(2 chip)-70NS No parity	**$34**
1M x 9 (9 chip)-70NSMajor brand	**$42**
4M x 9 (3 chip)-70NS	**$129**
4M x 9 (9 chip)-70NS	**$148**
1M x 9 (3 chip)-60 Major brand	$41
4M x 9 (9 chip)-60NS	$159

ESIMMs(72 Pin)

256x36-70NS	$55
512x36-70NS	$95
1x36-70NS	**$153**
2x36-70NS	**$309**
4x36-70NS	**$569**
1x36-60NS	$158
2x36-60NS	$329
4x36-60NS	$635

SIPPS

256x9 (3 chip)-70NS	$14
1x9 (3 chip)-70NS	$43
1x9 (3 chip)-60NS	$46

DRAMs

1x1-70/80NS	$5.50/5.25
256x1-70/80NS	$1.75/1.60
256x4-70/60NS	$5.75/5.50

MEMORIES for MACs

MACINTOSH

1x2chip-70/80NS	$35/33
1x8chip 70/80NS	$40/37
2x8chip 70/80	$85/80
4x8chip-60/70/80NS	$137/126/125
16x8chip-70NS	CALL

APPLE UPGRADES

Centras & Quadra 600 series

256x32-70NS	$39
512x32-70NS	$78
1x32-70/80NS	$136/133
2x32-70NS	$278
4x32-70NS	$510
8x32-70NS	$1175

QUADRA 800 SERIES

512x32-60NS	$78
1x32-60NS	$137
2x32-60NS	$275
4x32-60NS	$645
8x32-60NS	$1285

CACHE RAMs

32x8-20	$6.90
64x4-20	$7.50
8x8-20	$3.70
16x4-20	$3.85
64x1-20	$6.70
128x8-25	$38
32x8-15	$7.90
64x4-15	$9.50
8x8-15	$4.10
16x4-15	$4.75
64x1-15	$8.45
128x8-25	$3

CPUs & CPU FANS

INTEL

386 DX33	$40
486 SX25/33	**$65/88**
486 DX 33	**$219**
486 DX 50	**$289**
486 DX2 50	**$245**
486 DX2 66	**$255**
486 DX-4 75/100	$NA/685
Pentium 60MHz	$464
Pentium 66MHz	$588
Pentium 90MHz	$749

AMD

386 DX 33/40	$47/48
486 DX-33	**$148**
486 DX 40	**$166**
486 DX2 50	**$205**
486 DX2 66	**$229**

CYRIX/TI

486 DLC 33/40	$62/68
486 DX 33/40	**$128/139**
486 DX2-50/DX50	**$168/252**

CPU Fans

486 heat sink and fan	**$7.95**
Pentium 60,66/90	**$12/15**

MATH-COPROCESSORS

INTEL

80387 SX 16/20/25	$45/64/75
80387 DX 16/20/25/33	$35/40/45/80

Overdrives - call for latest prices

IIT

3C87SX-16/20/25	$39
3C87SX-33	$39
3C87DX-25/33/40	$39

CYRIX

83S87SX 25	$39
83S87SX 33	$39
83D87-33	$41
83D87-40	$41

WEITEK

4167-25	$265
4167-33	$425

LASER EXT. MEMORIES

HEWLETT-PACKARD

HP IIP, IIP+,III,IIID,IIIP	1/2/3/4MB.	$75/114/155195
HP II, IID	2/4MB	$124/199
HP IIISi	1/4MB	$76/204
HP IV	4/8MB	$165/365
Deskjet 500, 500C, 550C	256K	$88

PANASONIC

KXP 4410/20/30	1/2/3/4MB	$98/148/175/215
KXP 4450	1MB	$137
KXP 4455	2MB	$164

OKIDATA

OKI 400	1/2MB	$98/119
OKI 800/820	2/4MB	$123/193
OKI 810	1/2MB	$111/189

Special Terms and Conditions for this Section: CPU and Memory prices change on a daily basis; please call for the latest prices. These products when bought without systems come with a shorter warranty - please inquire. We do not stock many of the above products - please call for availability.

SOFTWARES

For Networking, Communications, Tape Storage Drivers, Networking Drivers, Multi-Media and Speciality Softwares also look in the corresponding sections.

UTILITIES

Norton Utilities V 7.0/Anti-Virus v2.1	$116/89
QEMM 386 V7.0	$69
AfterDark V2.0 WIN	$29
PC Tools V 8.0A	$57
Auto-Doubler/Disk-Doubler	$68/61
LapLink V5.0 FOR NETWARE	$74
MickyMouse/StarTrek Screen Saver	$39

DESKTOP PUBLISHING & GRAPHICS

Corel Draw V4.0/UPGRADE	$383/218
Pagemaker/WIN V5.0	$554
Harvard Graphics For Windows	$248
Norton Desktop WIN V2.2	$115
Micrographx Graphics Works	$158

DATABASES

Accesss for Windows	$145
CA-Clipper V5.2	$512
DBASE IV V2.0	$513
FoxPro For Win/DOS 2.5 Upgrade	$300/305
FoxPro LAN	$call
Paradox V4.0/WIN	$524/145
Q & A 4.0	$243
Superbase 2.0 WIN	$345
LOTUS SMARTSUITE	$448
Gupta SQL router/SQL server	$166
Gupta SQL for DOS	$2597
Gupta SQL gateway for netware	$3252

ACCOUNTING/BUSINESS

CA-Accpac BPI Integrated	$148
CA-Acc. Simply Accounting DOS	$79
DAC Easy Accounting/Payroll 4.3	$94
Works for WIN 2.0	$129
MS Project 3.0 for WIN	$425
MS Office 4.2 (Word,Excel,Pwrpoint,Mail)	$475

SPREADSHEETS

LOTUS WORK V3.0	$99
MS Excel V5.0	$292
MS Works for WIN	$123
Quattro Pro V 5.0 WIN/DOS	$54

WORD PROCESSING AND GRAPHICS

AMI Pro 3.1	$240
Grammatik	$73
Professional Write V 2.2	$159
MS Word 6.0 for DOS/WIN	$305/299
Word Perfect 6.0 for DOS/WIN	$296/294
WordStar 7.0	$264

COMMUNICATIONS

Procomm Plus 2.01/WIN	$70 /97
WinFax Pro V 3.0 for WIN	$99
Norton PC Anywhere 4.5 Host/Rem	$65/86
CrossTalk for WIN	$129

PROGRAMMING LANGUAGES & OPERATING SYSTEMS

M.S. DOS 6.2/UPGRADE	**$48**
M.S. OEM Windows 3.11 for PC system	**$56**
M.S. Windows V 3.11 Original	**$89**
DESQView V1.1	$163
Windows NT 3.1 /UPGRADE	$314/278

ACCPAC plus AUTHORIZED DEALER

Prices given in bold are usual stock items, prices not in bold are special order items and require a 20% deposit, are not returnable, and take 2-3 days lead time.

CASH COUPONS

HARD DRIVES	HARD DRIVES	HARD DRIVES	HARD DRIVES	NETWORKING	MULTIMEDIA
CONNER 420IDE $209	MAXTOR 540 IDE/SCSI 8.5 MSEC $335/409	Conner 1 GB IDE/SCSI $539/625	QUANTUM 2.1 GB 10MSEC/5YEARWARNTY $1,049	16BIT NE2000 COMP COAX/TP.....$29 16 BIT NE2000COMP COMBO.....$39 INTEL 10BT FLASH.............$99 8 PORT TP HUB W/AUI.........$159 16 PORT TP HUB W/AUI........$359	8BIT SOUND C/KIT.......$39/59 MITSUMI 1X CD ROM..........$79 MITSUMI 2X INT..............$130 TOSHIBA 2X 3401 INT.....$261 NEC 510-CDR 3X..........$334

COMMUNICATIONS

FAX-MODEMs

PONY 902Z 96/24 Fax (Send)/Mod Int	**$27**
PONY 992Z 96/24 Fax/Modem	**$40**
PONY 992NZ 96/24 F/M, v.42 bis Enh	**$55**
PONY 1414IZ 14.4 F/M,.32/.42 w/Bitfax Int.	**$73**
Pony 14.4 F/M .32/.42 Int w/Voice prm	$126
PONY 992PZ Pocket 96/24 F/M,.32/.42	$63
PONY 1414PZ Pocket 144 F/M, v.32, v.42	$184
PONY 992MG PCMCIA 96/24 F/M v 42	$132
PONY 1414MG PCMCIA 144/144 F/M v.42	$244

AT&T Paradyne

DataPort 14.4 Fax V 32bis External	$175
Comsphere 19 2/14 4 Fax v.42bis Ext.	$575
Keep in Touch PCMCIA 14.4 S/R Internal	$299

US ROBOTICS

14,4 Sport Mod V.32bis V.42bis I/E	$113/135
14,4 Sport Mod/Fax V.32b V.42b I/E	**$117/141**
14,4 Mac&FAX Ext Mod/fax	$165
14.400 HST Courier Dual V.32bis.	$742
Modem Sharing Single/Dual Kit	$548/964
World Port PCMCIA 14 4 Mod/fax Int	$305

INTEL

14.4 Fax/Modem Winfax Int./Ext	**$119/138**
Satisfaction 200/300Fax Int	136/125
Satisfaction 400 14.4 S/RFax Int/Ext	$295/329
14.4 PCMCIA S/R Internal	$259
Net SatisFAXtion v2.5 20 User	$745
Wireless modem for lan based server	$755

HAYES

Accura 14.4 F/M 32/.42 Int/Ext	$155/165
Optima 14.4 F/M 42 Int/Ext	$372/372
Optima 14 4 F/M PCMCIA	$285
Optima 14.4 F/M Pocket	$335

ZYXEL

U-1496B 16 8/14,4 VoiceFax SW,S/R Int	$318
U-1496B+19.2/14,4 Voice Fax SW,S/R Int	$429
U-1496E 16 8/14 4 VFax SW,S/R LED Ext	$298
U-1496E+ 19.2/14 4VFaxSW,S/R LED Ext	$419
U-1496+ 19 2/14 4VFaxSW.S/R LCD Ext	$625
U-1496+19.2/14.4 S/R LCD MAC Ext	$639
U-1496E+ 19 2/14 4 S/R LED MAC Ext	$429

PRACTICAL PERIPHERALS

14.4 Fax/Modem S/R Internal	$143
14 4 Fax/Modem S/R External	$154

Miscellaneous

Supra 14.4 F/M Int/Ext	$125/135
Supra Mac 14.4 Ext	$159
Megahertz 14.4 PCMCIA Type3	$298
Motorola 14.4 Int/Ext	$call

NETWORKING PRODUCTS & SERVICES

ETHERNET Adapters

NE 2000 Plus Comp 16bit Coax/10BT	**$32/32**
NE2000 Plus Comp Combo soft&hard config	**$40**
D-Link 16 Bit,SoftConfig. 10BT 1/6 Pack	$70/377
Intel EtherExpress 16/5pk/20pk	**$104/479/1815**
Intel EtherExpress 16 MCA C/16 MCA TP	$171
Intel EtherExpress 32 EISA/Flash 32C.	$419/239
Intel EtherExpFlas TP/C 5/20pk	$112/585/2059
SMC Ethcard 16 UltCx/6 Pk/24pk	$109/574/2149
SMCEthcard+IA for MCA/TP	$179
SMCEthcard+Elite16 Cx/TP1/6/24	$119/615/2289
3 Com 503 Etherlink II 16 Bit Coax/TP	**$159/169**
3 Com 507 Ethlink II 16 Bit Coax/TP	**$289/299**
3 Com 509 Ethlink III Coax/5Pk	$119/505
3 Com 509 Ethlink III Combo/5/20.	$145/559/2199
3 Com 529/579 EISA Coax/10 BT/5pk	$229/959
EagleNE2000 Plus/5Pk	$89/385
EagleEP2000 Plus/5pk	$92/405
Asante Etherpack2000+ Coax/10 BT	$129
Microdyne NE2000 Plus	$109/94
HP Ethertwist PCLink/6pk.	$159/759

ARCNET

16bIT Star/bus Topology-combo	$65
4Port Passive Hub	$15
8 Port Coax stackable Active Hub	$139

ADAPTERS for TOKEN RING

Intel Token Express 16/4 ISA/MCA	$429/469
SMC Token Ring Adapter 16/4	$345
3 Com Tokenlink III 16/4 ISA/EISA	$455/635
IBM Token Ring Adap II	$289

POCKET LAN ADAPTERS for Notebooks

Advanced LAN Net Coax/10BT	$129
XIRCOM PE3 10B2/BT/BC.	$274/274/299
XIRCOM 16/4 MBNS Tokenring w/Type 1Bnc	$525
Xircom 16/4 Tokenring w/Type 3Coax.	$525
DLINK DE-600 Softconfig. Coax/10BT	$172

PCMCIA ADADAPTERS for PalmTops

DLink DE-650 Coax/TP	$191/195
NATIONAL NE4100 COAX/10 BASE T	$214
XIRCOM Credit Card BNC/RJ-45	$269
XIRCOM Crdit Card Courso	$299
GVC Adapter	$137

CABLES & CONNECTORS

ETHERNET RG58 or RJ45 10BaseT

Readymade w/Connectors 10'/25'/50'	$4/6/9
RJ45 10BT patch cabnles 7'/25'	$4/6
Token Ring patch cable	$23
RG58 Bulk SPOOL	$80
RJ45 10BT 1000' level4/5	$119/130
BNC 50 Ohm Terminators/Crimp-ON/Barrel.	$1.49
BNC T-Connectors	$1 99

Concentrators

CeLan 2-Port BNC/AVI Repeater	$235
Ce-Lan 4-Port BNC/AVI Repeater	$445
Allied Telesis 4-Port Repeater 2AVI,2BNC	$750
Allied Telesis,4-Port,8BNC,1AVI	$699
Allied Telesis,8 -Port,8 BNC,1AVI	$785
Allied Telesis-3008 Multi-port 8BNC,1AVI	$1189

We provide Networking
Installation and Maintenance
Services at good rates

Hubs

CeLan 8 Port 10 BT w/BNC Cascade port	**$168**
CeLan16 Port 10BT w/AUI exp. port	**$385**
CeLan 16 Port 10BT managable	$439
Allied Telesis 12 Port RJ45,1AUI	$459
Asante 8 Port Hub,8RJ45,1BNC	$249
Asante 12 Ports,12tp,1BNC Thin,1 AUI Thick	$475
Asante 1701 Smart 12Ports/SNMP	$1019
Microdyne 18 port 10 Base T5000 series	$619
D-Link 12 Port 10 BaseT.	$399
D-link DE-1500 w/SNMP	$869
D-link K1032 32Port w/SNMP	$1199
Intel EE 12 Port 10 BT Hub Int w/Harmonica	$634
Intel EE 12 Port Hub Int EISA w/Harmonica	$699
SMC 8 Port Concentrator/12 Ports TP	$325/599
SMC Intelligent 16PT UTP	$1129
Synoptics 2800 A 16 Port w/AVI	$699
Synoptics 2804 16 Port w/Fiber Optics	$951
3 Com Link Builder 3C621 12 Port	$419
3 Com Link Builder FMS 24/48 port	$1179/2689

BRIDGES

Allied Telesis local Ethernet Bridge	$1645
3 Com 802C NetBuilder local Ethernet	$3399
3Com 750 NetBuilder Token Ring local	$4714
3Com 5823C NetBuilder Remote.	$5319
Synoptics 3323S Ether Local w/AVI	$2353
Synoptics 3522 Token Ring	$5319
Novell Multiprotocol Router v 2.0	$669

PRINTER SHARING

Ethernet Print Servers

INTEL

Ethernet NetPort II for Coax,10BaseT	$385/379
Token Ring NetPort with DB9 Connector	$529
Netport ExpressXL Coax, UTP, 10BaseT	$624

(Conpact design for easy connectivity on on versions of Novell Netware. Comes with either 1S/1P or 2P ports)

OTHERS

Eagle NPE400 Parallel Port RJ-45/Coax (1P)	$364
XIRCOM Pocket Ethernet RJ45/Coax	$305/289

(Allows a Pocket LAN Adapter and a Parallel Printer to be attached to one LPT Port)

DEDICATED PRINTING BASED

Simple AUTO-SWITCHING

2 Computers to 1 printer Electronics	**$24**
4 Computers to 1 printer Electronics	**$38**
2 Computers to 1 Printer Bi-directional S/P	$49/45
4 Computers to 1 Printer Bi-directional S/P	$69/61
*Fax Swithcer 2 Port Fax/Telephone.	$85

PRIMAX Advamced Printer Sharing

PrinterNET Transm/Rec. kit (w/25')	$69
PrinterNET Starter kit	$155

(It can connect 16 computers to 6 printers)

ModularLink Transm DB-25(w/25')	$40
ModularLink · Receiver Cen	$45
ModularLink Starter Kit	$106

(It can connect up to 16 computers to printer)

COMING SOON... PRIMA NET STARTER KIT & TRANSMITTER/RECEIVER KIT WITH 25' CABLE

NOVELL NETWARE

Ver 3.12 5/10/25/50 User	$595/1429/1925/2499
Ver 3.12 100/250 User	$3683/6327
Ver4.02 5/10 User	$835/1825
Ver4.02 25/50 User	$2635/3499
Ver4 .02 100/250 User	$4699/9143
Ver4 .02 500/1000 User	$15375/27932
Netware Personal 2User kit w/2 coax cards	$179
Netware Lite v1.1 w/Win utilities	$72
Netware Lite v1.1 w/Win Util&Dr. DOS	$90
Dr. DOS 6.0	$72

(Novel's prices are changing frequently, so please call for the latest price changes)

EIECTRONIC MAIL

by CC:MAIL

Platform Packs: *(For connectivity on all LANs and across all LAN Bridges and Gateways. For support of any combination of Server-to-Server, LAN-to-LAN, and Remote Workstation-to-LAN messaging One Platform pack is required for configuring any system)*

CC:Mail DOS 4.2/Win 2.0/Unix 1.0	$199/325/345
CC Mail Macintosh 2 0/OS2 3.2.	$329/345

User Packs: *(For adding users to the Platform Pack)*

CC:Mail 10/25/100 user v4.0	$229/549/2097

Remote Users: *(For connecting one remote user to any CC:Mail user net via Public Telephone Lines)*

CC:Mail Remote for DOS3.3 or Mac 2.01	$199

Gateways: *(For exchange of messages with other CC:Mail Post Offices on the same LAN or Bridged LANs)*

CC:Mail Router v4.0/Fax 1.2	$839/1298

PEER-TO-PEER NETWORKS

ASA

(2) copies of Novell lite, (2) NE 2000C Cards, Cables, Terminators etc.	$249

WINDOWS FOR WORKGROUP

Add-On 1 user kit w/Win3.1	**$149**
Add-On 1 user w/o Win 3.1	**$48**
Multi-Unit 20 Node/Server	$734
Windows NT Advanced server	$949
Windows NT v3.1 regular	$329

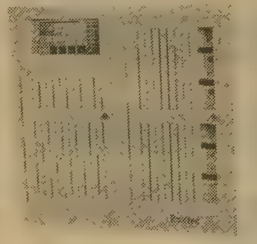
ARTISOFT PRODUCTS

AE-2 Starter Kit v5.0 DOS/Win	**$454/525**
AE-3 Starter Kit v5.0 DOS/Win	**$525/545**
AE-2/3 16 BitAdapter w/lantastic soft	$192/234
Lantastic 2MBPS Kit 5.0	$339
Lantastic v5.0 AI DOS 1/6/12pk	$81/479/959
Lantastic v5.0 AI Win 1/6/12pk	$93/549/1099
Lantastic 6.0 software only single user	$89
Lantastic for TCP/IP	$199
Noderunner 2000C/T 1/6pk.	$174/975

RAID SOLUTION

Complete SUB-SYSTEMS with duel hot-swayable power supplies

FlexArray IX, a hardware based RAID, is a proven selection for all Sun SPARC, IBM RS/6000 and other servers, running database packages and all other applications specially servers sites for remote clients Its simple installation and negligible system administrative requirements has proven it to be a good selection for the Mac, IBM PS/2 and all other Intel based servers for Novell Netware, SCO, Microsoft NT etc where a full time network manager is not present



ON SITE SERVICE IS AVAILABLE......24 Hours a day. 7 days a week........ to provide you the ultimate assurance in up time.

RAID SYSTEM

On site service... 24 hours a day ...7 days a week

5 GB	10 GB	10 GB Barracuda
$7,795	$10,595	$11,295

For information please call Paul Gulati at (408) 496-6853 ext 208 or John at ext 211 anytime.

UPS'S

AMERICAN POWER

APC-BK 250 ,7 MION,386SX,WS	$99
APC-BK400,10MIN,286,386SX,WS	$158
APC-BK450	$209
APC-BK600,15 min,386/486 FS	$259
APC-BK900/12000,15min,Multi-FS	$367/487
Power doctor/Call UPS	$69/102

SMART UPS (ON-LINE/AUTO BACKUP)

APC 400, 10 min,286,386 FS/WS	$288
APC 600,15 min,386,486 FS/WS	$335
APC 900,15 min CAD/CAM WS/FS	$496
APC 1250,15 min,Multiple FSs	$613
APC 2000,20 min, Mini computers.	$1095
Matrix UPS 3000 VA, Multi-server	$2869

INTERFACE KITS/SMART MONITORING

Power chute Plus for Novell/nix,Xen	$64/98
UPS Monitoring board for Novell	$61

ASAコンピュータ

【日本人のお客様へご挨拶】

ASAコンピュターは日本人のお客様を歓迎致します。ASAでは6，000以上ものASAブランド製品又はOEMビジネスによるコンピューター製品を取り揃えお客様のオーダーにより3日以内に全米各地どこへでもご注文の品を発送致しております。ご質問あるいはご注文がございましたらお気軽にカメロン（インターナショナルセールス&マーケティング副社長）までお電話ください。

私達は日本のお客様に肌目細くサービスを提供しています。今後ともASAをどうぞよろしくお願い致します。

◆◆◆募集中◆◆◆

この度ASAコンピューターでは日本においてASAコンピューターを販売してくださる方を募集しています。ご希望の方又は興味のおもちの方は、カメロンまお電話ください。お待ちしています。

☎ (408) 496-6953
FAX (408) 988-0359

Translated by Taku Fujita

Prices given in bold are usual stock items, prices not in bold are special order items and require a 20% deposit, are not returnable, and take 2-3 days lead time.

MAIN BRANCH

ASA COMPUTERS, INC.
2354 Calle Del Mundo
Santa Clara, CA 95054

National: (800) REAL - PCs
Local: (408) PCs - FOR - U
Fax: (408) 988-0359

Hours: M to F 9AM - 6:00PM
Sat: 11AM - 4PM

PLEASANT HILL, CA

STI COMPUTERS
SandalWood Center
609 Gregory LN # 110
Tel: [510] 256-9938
Fax: [510] 256-9983

INDIANAPOLIS, IN

THE COMPUTER CENTER
5324 W. 38th Street
Indianapolis, IN 46254
Tel: [317] 291-4599
Fax: [317] 291-1482

VOLUME ORDERS

RESELLER/VAR PRICING
(408) 496 - 6953
ACADEMIC PRICING
(408) 496 - 6853 Ex 211
DEALERSHIP PROGRAMS
(408) 496 - 6853 Ex 222
SALES REPRESENTATION
(408) 496 - 6853 Ex 204

Each Store/Rep is an independent entity and is responsible for its own liabilities.

Corporate Field Sales

Jeff Brooks: (408) 986 - 1622

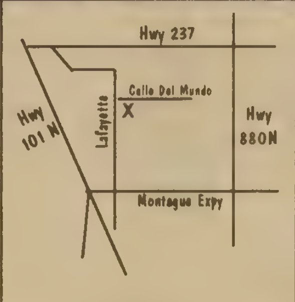
Harry Reynolds: (408) 866 - 1428

Will Farrish: (707) 575 - 1730

AIKA (AZ): (602) 443 - 3618
ASA (NJ): (717) 854 - 7473

Please Call for Systems/Networking with On-Site Services.

MAIN BR. LOCATION



Santa Clara, CA

TERMS AND CONDITIONS

COD, FOB Santa Clara, CA. Credit terms are available on approval. Manufacturer's warranty on parts varies. Three years limited warranty on systems assembly labor only. Prices are subject to change. Prices in () or marked with a "*" are on cash basis only Prices marked with "**" are clearance items & available while quantities last; regular prices for these items may be different.

Please call to check if we sell an item that may not be listed in this advertisement. We operate on Just-In-Time Inventory on many specialized items advertized here; please call regarding lead-time on these items. Not Responsible for Typographical Errors.

Please refer to the ASA Catalog for a full listing of the Terms and Conditions.

Back To School With BMUG

Plus: Doom In Cupertino, Or, Haven't We Heard This One Already?

By David Morgenstern

This month we take a look at the annual comings and goings of lucky kids who can leave the nest and move off to school, not to mention the collection of corporate techno-mongers and hackoids based at the Apple campus in Cupertino.

Students and Macintosh go hand in hand at BMUG. This has somewhat to do with the earliest origins of BMUG, founded by a group of UC Berkeley students. But it's also the spirit of free discourse, helping each other, and education that has filled our meetings and become an integral part of our activities. BMUG has shown that computing can be a force to bring people together. Onward!

Ivory Tower 3-D Modeling

The most important issue facing students and their parents when hauling the pile of clothes, skateboard, and compact discs up the steps of campus housing has nothing to do with books for classes. It's not about the location of the neighborhood coffee shop. Nor is it the roommate from hell, or the cute guy or gal with the VW convertible. The question bringing the furrowed brows will be: Which computer should I buy?

This is the multibillion-dollar question of the entire computer industry right now. Although Microsoft Windows seems to have most of the mind share and market share at this time, students should pick a Macintosh. Big surprise, you say! Of course, it would be a Mac.

The Mac is the most popular computer in higher education. Period.

Aside from the relative strengths of the Mac interface and system, and the weaknesses of the DOS/Windows platform, the prospects for support around campus should tip the balance. Although Apple and other computer manufacturers would like you to believe that nothing ever goes wrong with their products, it will. Even with the Mac, ease of use may not always mean ease of repair. But when something goes wrong or help is needed, will the answers and servicing be easily available?

The Mac is the most popular computer in higher education. Period. It's found in all departments, from the schools of science and business to creative arts; it's used for course work and in administrative divisions. So it's often easier to get on-campus support and fixes for Mac programs and hardware than it is for Windows machines.

In the past, it was difficult to recommend a particular Mac model without a careful analysis of short-term and long-term Apple prices. Nowadays, the new 630 models of desktop Macs (I think they have given them the Performa moniker) have an unbeatable combo of great prices and lots of power. Users should add extra random access memory (RAM), lifting the level up to at least 12MB, and 20MB are even better.

On the other hand, PowerBooks have the advantage of going to the library or classroom for on-the-spot note-taking. But if your student tends to lose things easily, choosing a notebook computer may be a problem. Hauling around a piece of equipment worth several thousand bucks requires a higher level of vigilance and responsibility than mere books, jackets, or purses.

No matter which model or form factor holds your interest, it's a good idea to take a look at the sale bundles offered at the beginning of the year at some schools.

The School Of Hard Drives

Remember that hardware is not the only part of the picture. When buying their computers, future users frequently forget to set aside sufficient bucks for software. Here are a few tips for families purchasing a new computer.

- A good addition to a student's hard drive is Quicken 4.0, the personal accounting program from Intuit. School is often the first opportunity for people to really have control over their finances, and this freedom can lead to some extremely hard lessons.

Quicken can keep track of everything financial, from checking to student loans. The only hitch is getting the young user to actually employ the program.

- Word processing is the number one use

BMUG's Choice for Macintosh Specialty Store — Celebrating Our 10th Year

MAC℠

Modern Accessories for Computers
Since 1985

800-BUY-A-MAC	Order Line for US & CA (Toll Free!)
(510) 644-0500	General Number / Sales Department
(510) 549-8785	Macintosh Repairs
(510) 644-0584	Order by Fax

2156A University Avenue, Berkeley, CA 94704

Rental, Lease or Purchase of Macintosh

Store Hours
10:00 a.m. -- 6:00 p.m.
MON -- SAT

ATM VISA MasterCard

TOP 10 Store in the Bay Area ... San Francisco Examiner Reader Poll

Modem

PowerPort Gold for PowerBook	**$269**
PB DataLink w/ Voice FaxModem	**$199**
Supra 2400 Baud Modem w/ Cable	**$89**
Teleport Bronze II FaxModem	**$109**
Supra FaxModem v.32bis LC	**$179**
Teleport Gold v.32bis 14,400	**$249**
US Robotics Mac&Fax 14,400	**$179**

Printer

NEC SilentWriter Model 640 — **$799**

HP LaserJet 4MP w/ Cable — **$1399**
•600dpi, 6MB RAM, Post Script II Laser

Deskwriter 560c w/ Cable — **$595**
•600 dpi Color Ink Jet Printer

StyleWriter II, w/ Cable, *low price* — **$299**

Memory Upgrade

256K Level II Cache, PowerMac	**$259**
1 Meg Simms, 100ns/80ns	**$49**
2 Meg Simms, 80ns	**$99**
4 Meg Simms, 80ns	**$199**
8 Meg Simms, Quadra/PowerMac	**$349**
16 Meg Simms, Quadra/PowerMac	**$695**
32 Meg Simms, Quadra/PowerMac	**Call**
4 to 14 Meg Board, PB Duo	**Call**
4 to 10 Meg Board, PB 145B/165/180	**Call**
4 to 10 Meg Board, PB 165c/180c	**Call**
4 to 16 Meg Board, PB 500 Series	**Call**

Micronet

Micronet 88 SyQuest, w/ 1 Cartridge	**$449**
Micronet 270 SyQuest, 1Cartridges	**$599**
SyQuest 44MB / 88MB Cart.	**$65/95**

Scanner

HP Scanjet IIcx Color Scanner — **$979**

Agfa Studio Scan 600 dpi Scanner — **$1095**
•24 Bit Photo-Realistic Color / 256 Gray-Scale
•4-Mice Rating by MacUser Magazine
•Agfa Quality at low, low price

Agfa Arcus Plus 1200dpi Scanner — **$2669**
•10 bit per pixel, 30 bit, 1 billion colors
•Excellent for professional prepress & image editing
•Slides, transparencies and X-ray images supported
•Photoshop Full Version 2.5 Included

Radius

Precision Color 17	**$995†**
PrecisionColor Pivot, Limited Qty.	**$695**
Radius 24XP-24 bit Video Card	**$509**

†After $100 Radius rebate

Super Mac

SuperMac Thunder 24 — **$1695**
•*Free* Thunder II Upgrade, $599 Value
•Upgrade Offer Expires June 30, 1994
•24 Bit Accelerated Card, Boost Up to 4200%!!!
•AcceleratePhotoshop w/ Thunder II Upgrade

SuperMatch 20T XL Multimode — **$1979***
•Large 20" Screen Trinitron Color Display
•Perfect for Color Publishing
*Price after rebate & with purchase of Thunder 24

Macintosh Repair

- **•PowerBook Not Running from Battery? We Can Repair It at 1/4 of Cost of Apple Dealer.**
- **•We Can Repair/Install While-You- Wait.**
- **•On Site Service Available**
- **•Expert Installation Ready by Next Day**
- **•Expert Repair in 1 to 2 Days**

Power Macintosh Super Sales

PowerBook 150 4MB/120HD	$1399
PowerBook 520c 4MB/160HD	$2739
PowerBook 180-In Stock 4/120/Modem	$1895
PowerBook Duo 280c 4MB/320HD	$3479
PowerBook Duo 280 4MB/240HD	$2495

PowerMac 6100
16/250/Window
Only **$2349**

Power Mac 6100/60, 8MB/160HD	**1669**
Power Mac 6100/60, 8MB/250/CD	**2119**
Power Mac 7100/66, 8MB/250HD	**2649**
Power Mac 7100/66, 8MB/250/CD	**2909**
Power Mac 8100/80, 8MB/250HD	**3839**
Quadra 605 4MB/160HD/Software	**$995**
Quadra 630	**Call**
Quadra 650 8MB/230HD	**$2049**
Quadra 650 8MB/230HD/CD	**$2299**
Quadra 840AV 8MB/230HD/CD	**$2749**
Quadra 950 8MB/230HD	**$3349**
Apple 14" Plus Monitor	$319
Apple 15" Portrait Monitor	**$399**
Apple Multiple Scan 17 Display	$979
Apple Multiple Scan 20 Display	**$1995**

MicroNet

Micronet 88MB/RW44MB Syquest

Special	With 2 88MB Cart.	$449
Limited Qty.	With 2 88MB Cart.	$499

Mac Trade-In

•We Buy or Trade Any Macintosh CPU (Mac SE minimum) & Peripherals

Mac Hard Disks

Hard Disk Tool Kit PE Included — **†External Unit Add $90 ea.**

Quantum LPS 170MB HD	**$199†**	**Seagate 2.4 Gig, Barracuda**	**$1795†**
Quantum LPS 340MB HD	**$359†**	**Quantum 2.5" 80 Go Drive**	**$199†**
Quantum 540MB HD	**$519†**	**Quantum 2.5" 256 Go Drive**	**$429†**
Quantum 1080MB HD	**$895†**	**Powerbook Hard Disk Case**	**$79**

Macintosh Rentals

Security Deposit Required

Quadra Computers	Mac SE 2MB/20HD	Mac IIsi 5MB/80HD	PowerBook 145B 4MB/80HD
Call	**$69** Monthly	**$129** Monthly	**$169** Monthly

Macintosh Lease To Own

Other Models and Options Available Call for Rates

Mac Quadra 650 8MB/230HD	**$71/Mo**
Mac Quadra 840AV 8MB/230HD/CD	**$95/Mo**
Power Macintosh 7100 8/250/CD	**$103/Mo**
Macintosh 14" Color Display (Sony)	**$14/Mo**
Apple Multiple Scan 17 Color Display	**$34/Mo**
Radius PrecisionColor Pivot	**$23/Mo**
Radius 20GS Monitor	**$32/Mo**
Thunder 24 Video Board--*Fastest 24 Bit*	**$61/Mo**
NEC Silentwriter 640, *New Low Rate*	**$30/Mo**
HP Scanjet IIcx, Color Scanner	**$36/Mo**

Prices Advertised Are for Microtimes Readers Only. Prices subject to change without notice.

This Ad Expires September 20, 1994

for computers, but students have particular needs for outliners and special dictionaries. Absolutely everyone in school can put bibliographic software to good use.

Index cards have gone the way of the dinosaur with the arrival of bibliographic database software. EndNote Plus by Niles and Associates is a powerful program that knows all about bibliographic references and styles. It can automatically generate footnotes and a correctly formatted bibliography for a paper, and uses a powerful search engine that can speedily sort through thousands of references.

Symmetry Software's Acta7 is a terrific outliner with a simple interface, but lots of power. It's the one used for years to take down the minutes of BMUG's weekly meetings.

Almost all word processing packages come with a spelling checker and thesaurus, but they are not truly capable for heavy-duty academic needs. BMUG likes the American Heritage Deluxe version from WordStar International. It uses a two hundred thousand-word dictionary and a five hundred thousand-word thesaurus. The digital version has all of the definitions found in the paper version, but can be searched with Boolean operators.

- Don't forget a number of small but important additions to your educational computer setup. Desktop models can use security kits that cost around $45. They include a couple of steel tabs that lock into slots on the back of the CPU, monitor, and keyboard, a galvanized steel cable, and a padlock. The cable is looped through holes in the tabs, and then through holes in the desk, or other heavy object. There are special versions for the different flavors of PowerBooks, too.

It's not a bad idea to purchase a surge protector, given the semi-reliable state of campus power grids. BMUG has always recommended the Panamax brand, which has a good reputation and offers a replacement warranty for systems attached to the unit. It's a good idea to buy one with lots of power plugs and phone line protection if the school is in a part of the country that suffers from lightning strikes.

- Many students will get an Internet email account through campus computing services. But parents should also get their own accounts (and perhaps a Mac to go along with it) to better communicate with the kids. Email is easier, and usually more timely, than getting through to them on the phone! And you don't have to relay messages through Neanderthal roommates or even worse, the latest boy/girlfriend.

Transition Wait States

Apple Computer. What can you say? The upper management is in disarray and out of control. All the good people are leaving the ship, or are being laid off. The stock is falling into the cellar and there are rumors of a takeover by any number of companies from Sony Corp. to AT&T. The company has failed in its introduction of new technologies, with products that are flawed in design and do not support current industry-wide standards. The sky is falling!

Sound familiar? This is not fresh news from today's business pages—it's all ancient history from the "golden days" of 1985.

Those of us with a longer view of Apple history see odd parallels with events in 1985. In those bygone days, the company's successful computer line was the Apple II, and the usurper was the Macintosh. Boy, was that Mac terrible! It had a strange graphic user interface, no command-line prompt, and couldn't run MS-DOS or Apple-DOS software. Apple promised to ship 425,000 of them the first year and only sold 250K. Doomsville.

Apple is making a huge transition in changing the CPU guts of the Macintosh from the Motorola 68000 family of processors, over to the Power PC. The size and complexity of current system software and hardware dwarf earlier efforts. And they have other worries—users.

In the past, Apple just began a new line of computers, forgetting the old. The Apple II, Lisa, Macintosh, and Newton have all broken new ground and have not looked backwards. But they couldn't pull that stunt with the Power Macs, and they've had to take extra time to ensure compatibility.

I expect that in the year 2003, I will walk into a BMUG meeting and hear the stories and rumors of the next cyclical disaster for Apple Computer. And I'm just as sure that the peanut gallery in the back of the hall will give me hell for being an old fogey!

Here are some thoughts on current Mac history by some members of the BMUG braintrust:

- **Scott Beamer, former BMUG business software guru and Mac author**

My own opinion is that Macs are still great machines, though they have long ago overrun my computer needs. However, the public doesn't always buy the best.

I have always taken a grumpy satisfaction in being different. I don't drink a popular brand of beer, I don't drive a popular brand of car, I don't listen to a popular radio station, I don't watch weeknight TV, I don't read books from Top 40 lists, etc. I don't do these things to be different. It's just that I am very willing to follow my judgment, even when I know almost everyone is making a different choice. I think most BMUGers are this way, as are many Berkeley-ites, and many Mac users.

However, the bigger problem is that the unnoticed shift in the desktop computer industry has been a rededication to big business. Once again, Apple, IBM, and Microsoft are focusing almost entirely on the enterprise and corporate levels, ignoring small business and home/office users. The key signal of this was *Macworld* magazine declaring itself a business magazine.

I assume someday there will be some increase in focus on "the rest of us," but it may be a longer wait than usual, as the high end is up for grabs, and the big players are slugging it out. Also, coming technologies (for example, Open Doc, Taligent operating system, PowerTalk) are aimed at this top part of the market and of little use to the lower ranks

The lower-end market is already being overserved by the hardware and software being sold to them today. It may be a while before a new level of functionality becomes available to low-end users, technologies like grammar checkers that actually work, OCR that's as easy to use as a photocopier, and useful computer connections to phones and television.

I suspect the next time the big computer companies' attention is turned on the home computer market, it will be to get the TV set-top box into all of our living rooms.

- **Stephen Howard, BMUG board member and *MacWEEK* networking guy**

"Is Apple in trouble?" is the question of the moment.

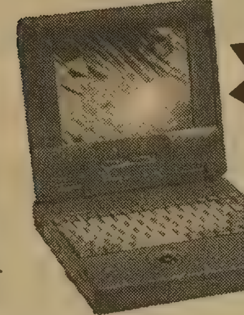
It has been, but I think the worst is over. Apple has suffered the transition to the Power Macs well, despite slow sales and a dearth of native applications. The Newton effort failed, but may be reborn next year (there really does seem to be interest on the part of big business). Claris is doing OK; eWorld will probably make a little money, too. But the software distribution products on CD-ROM stunk, and the latest round of servers was almost pointless. I guess Apple is batting 0.500 on "strategic" businesses.

Meanwhile the company's mighty Mac product engine has slowed, which makes

continued on page 302

The Low Price Leader for Quality Multimedia

SALE! SALE! SALE! SALE! SALE! SALE!



64-BIT PENTIUM

Model 3600

- **Intel Pentium 60/66MHz** CPU, **64-Bit** superscaler techonology, **thermostat-control cooling fan, AMI Flash BIOS**
- **Built-in audio** chip, Microphone & Speaker (**Record, compress, store and playback voice, sound & music to disk).** Sound Blaster & Windows Sound System compatible
- **32-bit VESA Local Bus Video with Windows Accelerator**, 1MB VRAM
- **32-bit VESA Local Bus IDE** (increase transfer rate by 45%)
- **Removable Hard Drive** 250MB (340, 540 Optional)
- **8MB RAM** (User upgradable to 16,24,**40MB**)
- **PCMCIA** one **Type III** & one **Type II**
- 1.44 MB Floppy Drive
- 10.3" Dual Scan/Active Color Display (supports 1024x768 256 colors on ext. Monitor)
- Extra large Built-in 25mm front-center Trackball
- **46 Watt** High Capacity **NiMH Battery**, Quick Charge 2 hr
- Ports for high-speed serial, enhanced parallel, keyboard, monitor & **VLB Docking Station**
- Deluxe Carrying Case & AC adapter

8MB RAM Included

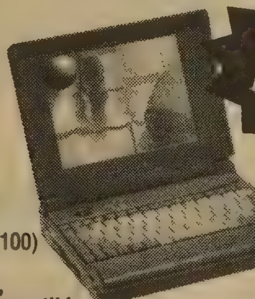
Dual Scan Color 60/66MHz	**$3125/3225**
Active Color 60/66MHz	**$4185/4285**
VLB Docking Station	**$475**

DUAL BATTERY

Model 9200

- Intel SL Enhanced 486-33 MHz CPU (Upgradable to **DX2-66, DX4-75/100**)
- **128 Cache**
- Built-in **Audio, MIC, Speaker, Sound Blaster & Windows compatible**
- 10.3" Display
- **32-bit VESA Local Bus Video**
- **1MB Video RAM** with **Win Accelerator**
- **PCMCIA III & II**
- 4MB RAM (exp. to 8/12/16/20/36MB)
- 1.44MB Floppy Drive
- **Removable 250MB** Hard Drive (340MB/540MB Optional)
- Built-in **front-center 25mm Trackball**
- **2 NiMH batteries**, Quick Charge 2hrs. (w/ hot swap)
- Ports for serial, parallel, external, monitor, keyboard/mouse & VLB Docking Station
- Carrying Case, AC Adapter
- Weight **6.6lbs**

Mono 64GS	~~$1845~~	**$1650**
Dual Scan	~~$2335~~	**$2130**
Active Color	~~$3315~~	**$3110**



LOCAL BUS IDE

Model 7500

- 486-33 MHz CPU (Upgradable to DX2-66, DX4-100)
- **8/16K Cache** (Built-in)
- Built-in Audio, **MIC, Speaker, Sound Blaster & Windows compatible**
- **32-bit VESA Local Bus Video & IDE**
- **1MB Video RAM** with **Win Accelerator**
- **PCMCIA III** or 2 IIs
- **4MB RAM** (exp. to 8/12/20/**36MB**)
- 1.44MB Floppy Drive
- **32-bit Removable 250MB** Hard Drive (340MB/540MB Optional)
- Built-in **front-center 19mm Trackball**
- **NiCAD battery**, Quick Charge 2hrs. (NiMH Battery Add $50)
- Ports for serial, parallel, external, monitor, keyboard/mouse & VLB Docking Station
- Carrying Case, AC Adapter
- Weight 6.2lbs

Mono 64GS	**$1695**
Dual Scan	**$2195**
Active Color	**$3175**

Everex StepNote

ONLY 5.3 LBS

- Intel SL Enhanced 486DX33 (Upgradable to DX2-50, DX4-75)
- **8/16K** Cache (Built-in)
- Built-in Audio, **MIC, Speaker, Sound Blaster & Windows compatible**
- **32-bit VESA Local Bus Video**
- **1MB Video RAM with Win Accelerator**
- **PCMCIA III** or 2 IIs
- 4MB RAM (exp. to 8/12/20/36MB)
- 1.44MB Floppy Drive
- Removable **250MB** Hard Drive (340MB/540MB Optional)
- Built-in **front-center 19mm Logitech Trackball with scalable Mouse Pointer & Auto-tracking**
- **NiMH battery**, Quick Charge 1.5hrs. Supports "Hot Swap" battery change Battery Gauge
- Ports for high-speed serial, parallel, external, monitor, keyboard/mouse & Docking Station
- Carrying Case, AC Adapter
- Weight 5.3lbs

Mono 64GS ***Limited Quantity***	**$1599**
Dual Scan	**$2345**
Active Color	**$3325**

Call for a Complete list of CPU, Hard Drive, Memory & PCMCIA Devices!

PCMCIA Fax Modem 14.4	**$180**
PCMCIA Megahertz Fax/Modem 14.4 w/X-jack	**200**
Smartlink Pocket Fax/Modem 14.4	**159**
PCMCIA Ethernet, Combo	**180**
PCMCIA Xircom Ethernet Combo	**280**
PCMCIA Xircom Ethernet, 10 BT	**229**
PCMCIA Xircom Ethernet, Coaxial	**235**
PCMCIA Adaptec SCSI-II Controller	**285**
Parallel to SCSI adapter	**120**
Universal Car Adapter for Laptops & Any Appliances	**70**
Toshiba External CD-ROM	**379**
NEC 3X Portable CD-ROM	**389**
Mitsumi 101-key Keyboard	**20**
Laplink Cable	**12**
Soco 14" Non-Int Monitor .28	**239**

We carry all Notebook memory and hard drive upgrades!

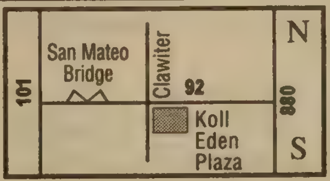
CYPRESS COMPUTER INC.

26120 Eden Landing Road, Suite 6 ❖ Koll Eden Plaza, Hayward, CA 94545

Tel: 510-786-9106 ❖ Fax: 510-786-9553

1-800-728-6688

Hours: Monday-Friday 8:30-6 Saturday 9-12:30 & 1:30-5



3 Years Labor & 1 Year Parts Warranty!

We Will Beat Any Advertised Price!

Fast 48 Hour Turnaround Service Guaranteed

If we can't meet our deadline, we'll give you a free loaner.

Solid Reputation

Our happy customers include: The US Postal Services, Stanford University, EBMUD, Signal Sciences, Sage Instruments, New York Life, Mervyn's, Etc.

We Upgrade And Repair All Notebooks and Laptops Makes and Models. Over 5 years Experience.

Leasing and 0% Financing Available

LINDEN'S PREMIER SYSTEMS

We do not sell the products only, But the after-sale services also.

TOP QUALITY, PROFESSIONAL SUPPORTS, BEST PRICES.

SYSTEM	BASIC SYSTEM	STARTER SYSTEM	ECONOMIC SYSTEM	BEST BUY SYSTEM	PREMIUM SYSTEM	MULTIMEDIA SYSTEM A	MULTIMEDIA SYSTEM B
386DX40 (A)* ISA	$235	$787	$813	N/A	N/A	N/A	N/A
486DX33(C)* VLB	$339	$863	$917	$1,202	$1,465	$1,439	$1,566
486DX33(I)* VLB	$435	$958	$1,012	$1,297	$1,560	$1,534	$1,661
486DX40(A)* VLB	$379	$902	$956	$1,241	$1,504	$1,478	$1,605
486DX2-66(A)* VLB	$445	$968	$1,022	$1,307	$1,570	$1,544	$1,671
486DX2-66(I)* VLB	$473	$996	$1,050	$1,335	$1,598	$1,572	$1,699
486DX4-100 VLB	$809	$1,332	$1,386	$1,671	$1,934	$1,908	$2,035
Pentium 60 VLB	$811	$1,334	$1,388	$1,673	$1,936	$1,911	$2,037
Pentium 66 VLB	$931	$1,454	$1,508	$1,793	$2,056	$2,031	$2,157
Pentium 90 VLB	$1,229	$1,752	$1,806	$2,103	$2,367	$2,341	$2,467

BASIC SYSTEM : CPU, M/B W/128K cache, 1MB RAM, 2HD/2FD IDE controller w/2S/1P/1G, 1.44MB Floppy Drive, Mini-Tower Case 101-Key Enhanced Keyboard
STARTER SYSTEM: Basic System w/4MB RAM,,210MB HDD, 512K Video Card, 14" .39 Monitor
ECONOMIC SYSTEM: Basic System w/4MB RAM, 210MB HDD, 1MB ISA Video Card, Proton 14" .28 Monitor
BEST BUY SYSTEM: Basic System w/256K Cache, 8MB RAM, 2 FDD, 420MB HDD, 1MB VLB Video Card, Kanaka or Proton 14' .28NI Monitor
PREMIUM SYSTEM: Best Buy System w/Medium Tower Case, 540MB HDD, 15" ADI 4GP Monitor
MULTIMEDIA SYSTEM A : Best Buy System w/Media Vision Spectrum 16, Mitsumi 2 speed CD ROM, Proton 14" .28NI w/speaker Monitor
MULTIMEDIA SYSTEM B: Best Buy System w/Sound Blaster Pro 16, Panasonic 2 speed CD ROM, Proton 15" w/speaker Monitor

● **Custom Configuration**: Call us with your needs.

✸ A-AMD CPU, C-CYRIX CPU, I-INTEL CPU.

MULTIMEDIA ☆☆☆ MULTIMEDIA ☆☆☆ MULTIMEDIA ☆☆☆ MULTIMEDIA

CD-ROM

Mitsumi, DS, FX001D	$135
NEC, DS, CDR-210(SCSI)	$170
NEC 3X, CDR-510 (SCSI)	$325
Panasonic, DS, CR-562B	$140
Philips, SS, CM205	$ 67
Texel, DS, 3025(SCSI)	$270

SOUND CARD

Media Vision Spectrum 16(SCSI)	$75

(Limited quantity only !!! Don't miss the chance !!!)

Sound Blaster Pro 16 Basic	$91
Sound Blaster 16 SCSI	$170

SPEAKERS

IRS 40 Watts	$25
IRS 80 Watts	$70
Labtec CS150	$16

CD-TITLES

More than 100 titles ☎

MONITORS ☆☆☆☆ C. R. T.'S ☆☆☆☆ MONITORS ☆☆☆☆ C. R. T.'S

ADI--Microscan, Full Screen(1280x1024)

14" .28NI Green 3EP/3EPLR	$270/$280
15"/17" .28NI Green LR 4GP/5EP	$400/$660
17" .26NI LR 5A	$700

CTX

14" .28I/.28NI	$235/$255
15" .28NI, 1565 Green Digital Control	$370

KANAKA (BY CANON)--FULL SCREEN

14" .28I/.28NI, Green	$230/$245
15" .28NI, Green, LR, Digital Control	$345

MINI-MICRO

14" .39I/.28I/.28NILR	$190/$220/$240
15"/17" .28/.26, Flat, LR	$350/$720

PROTON--FULL SCREEN, MULTIMEDIA

14" .28I/.28I with Speaker	$220/$230
14" .28NI/.28NI with Speaker	$245/$260
15" .28NI, 1280x1024	$340
15" .28NI, 1280 x 1024 with Speaker	$360

Black Monitor available for Proton

NANAO, NEC, SONY, VIEWSONIC............☎

VIDEO CARDS ☆☆ VIDEO CARDS ☆☆ VIDEO CARDS ☆☆ VIDEO CARDS

Monochrome Card	$12
SVGA 256K/512K ISA	$28/$42
Cirrus Logic ISA/VLB 1MB	$60/$70
Trident ISA/VLB 1MB	$58/$68
Cirrus Logic/Trident VLB 2MB	$140/$130

ATI

Ultra Plus, VLB PCI 2MB DRAM	$165
Ultra Pro, VLB, PCI VRAM	$238
Wonder ISA/VLB/PCI 1MB	$112

DIAMOND

Speed Star Pro, ISA/VLB,1MB	$100
Stealth 24, ISA/VLB,1MB	$125
Stealth Pro, VLB, 1MB VRAM	$240
2MB VRAM	$310
Viper VLB/PCI 2MB VRAM	$295/$275

GENOA

8500 VLB, 1MB/2MB	$90/$145
8900 PCI, 2MB	$180

ORCHID

CelsiusVLB,1MB/2MB	$125/$175
Kelvin VLB, PCI 1MB/2MB	$137/$177

Network services

Networking peripherals and system, File servers & workstations configuration; Networking hardware & software;Network design, Installation, Trainning,Mainteance contract... Professional installation.

GUARANTEE !!!
Multimedia Notebook
LOWEST *NP-9200* Price in Bay Area

MONO
9.5" 640 x VGA Display,
64 Gray Shades
COLOR
10.3" 640 x 480 Dual Scan or
9.5" Active Matrix Color VGA LCD
Display, 256 Colors
CRT
1024 x 768, 256 Colors

PROCESSOR
Intel 486 Upgradable CPU
486 SX-25/33 MHz
486DX-33 MHz
486DX2-50/66 MHz
486DX4-75/100 MHz

KEYBOARD
86-Key Enhanced Multi-Functional Keyboard

MEMORY
4MB RAM on Board
Expandable to 36MB
128KB Secondary Cache
Memory

BIOS
Award BIOS , 128KB Flash ROM

DISK STORAGE
Removable 2.5" 250/340/520MB HDD

PCMCIA SLOT
PCMCIA 2.0 Standard Compliant
1 Type IV Slot (Support 2 Type II or
1 Type III & 1Type II)

AUDIO SYSTEM
Sound Blaster and Microsoft Windows Sound System Compatible one Volume Control ,Built-in Microhhone, Built-in Speaker

DISPLAY
32-bit VL-Bus Interface with Windows Accelerator on Board
1 MB Display RAM

INTERFACES
1 Serial Port, 1 Parallel Port
1 External KB/Keypad Port
1 External CRT Port
1 External Microphone Jack
1 Line-in Jack, 1 Line-out Jack
1 200-Pin Connector for VL-Bus Docking Station

POINTING DEVICE
Built-in 25mm Trackball

POWER SYSTEM
2 NiMH Battery packs (Total 33W) w/Hot Swap Function. Universal, Auto-Switching AC Adapter, Quick Charging time 2 Hours Only

9200

250MB HDD	MONO	DUAL SCAN	ACTIVE
486DX-33MHz	$1,730.00	$2,180.00	$3,100.00
486DX2-66MHz	$1,790.00	$2,240.00	$3,160.00
486DX4-100MHz	$2,080.00	$2,530.00	$3,450.00

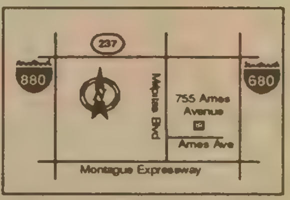
8200 Local Bus Display Notebook

- ☞ 128 K External Cache
- ☞ 4MB RAM on Board
- ☞ 3.5" 1.44MB FDD
- ☞ Local Bus Display
- ☞ 512KB Display RAM
- ☞ 86-key Keyboard
- ☞ Built-in Track Ball
- ☞ PCMCIA Type III slot
- ☞ 1 serial & 1 parallel
- ☞ External VGA port
- ☞ External K/B port
- ☞ Rechargeable NiCAD battery pack
- ☞ Carrying Case
- ☞ **Free** Parallel Interlnk Cable

250MB HDD	MONO	DUAL SCAN	ACTIVE
486SX-25MHz	$1,435.00	$1,865.00	$2,745.00
486DX-33MHz	$1,595.00	$2,025.00	$2,905.00
486DX2-66MHz	$1,665.00	$2,095.00	$2,975.00

TERM AND CONDITION

■All systems include one year parts & two years labor warranty.■Purchase orders are welcomed and subject to approval.■Prices reflect cash discounts.
■Shipping and handling charges are extra and are not refundable. ■All returns subject to 15% restocking fee & cover only Linden Micro Tech brand computers,excludes peripherals and software. ■No returns after 30 days.
■Defective items replaced or repaired at our discretion. ■Price & availability subject to change w/o notice. ■No responsible for typos.



LINDEN MICRO TECH

755 Ames Ave., Milpitas California 95035 ♦ Tel (408) 262-8200 ♦ Fax: (408) 262-8476
☆☆☆☆☆☆☆☆ Open Hours: Mon -- Fri: 9am--6pm, Sat: 10am--4pm ☆☆☆☆☆☆☆☆

Technical Expertise? Who can you
earned dollars to custom build a

UMiracle P5 PCI 60/66MHz

- UMiracle P5 PCI 256K Cache Motherboard
  with 4 PCI/4 ISA slots, Onbrd PCI NCR Fast SCSI-2
- 8MB 70ns 72Pin SIMM RAM (4MB x 2pcs)
- 16Bit IDE/FD 2S/1P/1G with HiSpeed 16550UARTs, 2.88MB Support
- 1.44M TEAC Floppy Drive
- 540MB Quantum Fast SCSI-2 LPS540S HD
- Diamond Stealth 64 PCI S3-964 2MB VRAM (Upto 4MB)
- Mag DX-15F 15" Multisync Digital-Control Green 1280NI
- Premium Digital Medium Tower 230W PS
- 101 Keytronic Keyboard

60MHz $2193

UMiracle **66MHz $2298**

Data to Compare

[illegible]

- Processor	78.34
- Video	5450.08
- Disk	1559.00
DOSMark	1106.33
Graphics WinMark	35.00
Disk WinMark	1410
WinStone	88.00

Test result based on our 66MHz system with16MB. See your PC Magazine for comparsion.

Intel P5 Premiere PCI 90/100MHz

- Intel P5 Pentium Premiere PCI II 256K Cache Motherboard
  with Enhanced IDE, HiSpd Serials, Enhanced Parallel, 2.88MB FD Support
- 8MB 70ns 72Pin SIMM RAM (4MB x 2pcs)
- 1.44M TEAC Floppy Drive
- 730MB Western Digital Enhanced ATAPI IDE WD2700A HD
- Diamond Stealth 64 PCI S3-964 2MB VRAM (Upto 4MB)
- Mag DX-15F 15" Multisync Digital-Control Green 1280NI
- Premium Digital Medium Tower 230W PS
- 101 Keytronic Keyboard

90MHz $2588

90MHz Available NOW!
Call for 100MHz!!

Fully integrated Intel Premiere PCI-II motherboard provides Enhanced IDE interface supporting Logic Block Addressing, Mode-3 IDE, HiSpeed 16550 UART Serials, enhanced Parallel, plus our new perfectly-matched WD 730MB Enhanced IDE, making IDE throughtput the best it can! Diamond Stealth 64 cranks out ultra high 35 Million Winmark V4.0. All these for mid-two thousands! What a package!

SuperMicro P5 PCI/VLB 90/100MHz

- SuperMicro P5 Pentium P54VL-PCI 512K L2 15ns Cache Motherboard
  with 4 PCI/5 16-Bit ISA w/ VLB Extensions, Power Saving Mgmt, Flash AMI BIOS
- 16MB 70ns 72Pin SIMM RAM (8MB x 2pcs)
- VLB IDE/FD 2S/1P/1G with HiSpeed 16550UARTs, 2.88MB Support
- Adaptec 2940W PCI Fast WIDE SCSI-2 Controller (Bare w/cable)
  50&68Pin Dual Channel, upto 15 devices, 20MB/s burst
- 1.44M TEAC Floppy Drive
- Fujitsu 1.08GB Fast Wide SCSI-2 68Pin M2694EQA HD
- Diamond Viper SE PCI Weitek P9100 2MB VRAM (upto 4MB)
- Mag DX-17FG 17" Multisync Digital-Control Green 1280NI
- Premium Digital Full Tower 250W PS
- 101 Keytronic Keyboard

90MHz $3745

90MHz Available NOW!
Call for 100MHz!!

SuperMicro trouble-free P54VL-PCI motherboard combining with Adaptec 2940W and 1.08GB Fujitsu fast WIDE SCSI-2 HD guarantees the highest data throughtput possible in current technology! Dual channel 68Pin and 50Pin together can control 15 SCSI devices with 20MB/s burst! Diamond Viper SE powerful 64bit Weitek 9100 chipset generates photo realistic images at super fast speed for professionals like you!

AIR P5 EISA PCI 90/100MHz

90MHz Available NOW!
Call for 100MHz!!

- AIR P5 Pentium EISA PCI 512K 15ns Cache Motherboard
  with 3 PCI/4 EISA slots, Adaptec 7870 PCI Fast WIDE SCSI-2 & Fast SCSI-2 onboard w/cable
  HiSpd 16550 Serials, Enhanced Parallel, onboard 2.88MB Floppy interface
- 16MB 70ns 72Pin SIMM RAM (8MB x 2pcs)
- 1.44M TEAC Floppy Drive
- Seagate 2.1GB Fast Wide SCSI-2 68Pin ST12550W HD
- Diamond Viper SE PCI Weitek P9100 2MB VRAM (upto 4MB)
- Mag DX-17FG 17" Multisync Digital-Control Green 1280NI
- Premium Digital Full Tower 250W PS
- 101 Keytronic Keyboard

90MHz $4821

Another top of the line from AIR! EISA and PCI bus on single board, Built-in Fast-Wide SCSI-2 using Adaptec 7870 (2940W equivalent) chipset supporting 15 SCSI devices, HiSpd 16550 UART serials, enhanced parallel - All you need for now and the coming future! We combine this machine with Seagate 2.1GB Wide SCSI-2 HD and make the burst mode throughput upto 20MB/s extremely fast transfer rate! Diamond Viper SE powerful 64bit Weitek 9100 chipset generates photo realistic images at super fast speed for professionals like you!

Bay Area is a great place when it comes to shopping for a computer - Only if you know what you are buying though. Buying from a PC builder who doesn't even know what AUTOEXEC.BAT is means throwing your money away and you will end up with pointing fingers here and there. Buying from a PC Integrator like **UMiracle** means plug and run, peace of mind for your computing life. Afterall, who else cares what those jumpers should be set, whether it is running optimally, and how it works with your software? Think smart, think **UMiracle** !

UMiracle
UMIRACLE MICROSYSTEMS
43038 Christy Street Fremont CA 94538
Phone: 510-226-6746 Fax: 510-226-6758
1027 San Pablo Ave Albany CA 94706
Phone: 510-526-0271 Fax: 510-526-0273

☑ Free Local Area Delivery for System Purchase
☑ 1 Year Parts and Life Time Labor Warranty
☑ No-on-hold Expertise LifeTime Tech Support 510-226-6790
☑ While-You-Wait Immediate Replacement/Repair Service
☑ 30 Day Money Back Compatiblity Guarantee on Systems

Prices, availablity and specification subject to change without notice . Not responsible for typographical errors
All advertising prices reflect 2% cash discounts . 15% restocking charge on all returned parts after 7 days

trust to spend thousands of your hard-
machine that works?

MultiMedia Upgrade

- -Teac CD-55A QuadSpeed MultiSpin, 195ms, 600KB/S
- -SoundBlaster 32 AWE
- -150W MultiMedia Stereo Amplified Speakers
- -Audio Cable

$860

Plus 10% off on any CD-titles

- -NEC 3Xi CD-510 SCSI-2 MultiSpin, 190ms, 450KB/S
- -SoundBlaster 16 SCSI-2/ASP
- -150W MultiMedia Stereo Amplified Speakers
- -Audio Cable

$624

Plus 10% off any CD-titles

- -Toshiba 3401B SCSI-2 MultiSpin, 200ms, 330KB/S
- -SoundBlaster 16 SCSI-2/ASP
- -TopTek Stereo Speakers 80W Amplified Channels
- -Audio Cable

$494

Plus 10% off any CD-titles

- -Mitsumi DoubleSpd 250ms, 300KB/S, Multispin
- -SoundBlaster16Multi-CD/ASP
- -TopTek Stereo Speakers 80W Amplified Channels
- -Audio Cable

$358

Plus 10% off any CD-titles

- -Panasonic CR-562 MultiSpin, 320ms, 300KB/S
- -Sound Blaster 16 Value
- -Media 690 Hi-Fi Stereo Amplified Speakers
- -Audio Cable

$288

Plus 10% off any CD-titles

UMiracle 486 Green ISA VLB

READY TO GO

- ○486 ISA VLB 256K Cache EPA Green Motherboard
- ○4MB 70ns 72Pin SIMM RAM (4MB x 1pc)
- ○Fast 32Bit VLB IDE Controller with 2S/1P/1G
- ○1.44M TEAC Floppy Drive
- ○420MB Western Digital IDE WDAC2420 HD
- ○S3-805 VLB 1MB Windows Accelerator
- ○KFC 14" 1024X768NI 0.28DP Monitor
- ○Premium Digital Mini Tower 230W PS
- ○Honeywell 101 Enhanced Keyboard

33SX-$1030
40DX-$1096
50DX2-$1138
66DX2-$1159
100DX4-$1507

Dare to Compare

[illegible]

- Processor............	45.75
- Video..................	5330.00
- Disk.....................	1198.00
DOSMark..............	727.87
Graphics WinMark..	9.57
Disk WinMark.........	867

Test result based on our 66MHz system. See your PC Magazine for comparsion.

UMiracle's new built-for-future motherboard features 30pin and 72pin SIMM sockets for your existing 30pin and new 72pin standard, great for upgrade! Optional 1MB cache further enhances windows and ACAD application performance. It features also AMI BIOS, a ZIP socket, and optional voltage regulator output 3.3V for 100DX/4 CPU. True EPA Green compliant power saving saves you hundred dollars on electric bills and extend the life of your PC!

UMiracle

AIR 486 ISA VLB - MIS-Line

READY TO GO

- ○486 AIR-MIS ISA VLB 256K Cache Motherboard w/ onboard Adaptec VLB-SCSI-2, VLB-IDE, 2S/1P
- ○4MB 70ns 72Pin SIMM RAM (4MB x 1pc)
- ○1.44M TEAC Floppy Drive
- ○540MB Quantum SCSI-2 LPS540S HD
- ○S3-805 VLB 1MB Windows Accelerator
- ○KFC 14" 1024X768NI 0.28DP Monitor
- ○Premium Digital Mini Tower 230W PS
- ○Honeywell 101 Enhanced Keyboard

33SX-$1157
40DX-$1223
50DX2-$1265
66DX2-$1286
100DX4-$1634

AIR
Advanced Integration Research, Inc

Dare to Compare

[illegible]

- Processor............	45.56
- Video..................	4687
- Disk.....................	1319
DOSMark..............	733.72
Graphics WinMark..	10.7
Disk WinMark.........	1090
WinStone...............	51.7

Test result based on our 66MHz system w/16MB. See your PC Magazine for comparsion.

UMiracle 486 PCI/VLB

READY TO GO

UMiracle

- ○486 ISA PCI/VLB 256K Cache Green Motherboard
- ○4MB 70ns 72Pin SIMM RAM (4MB x 1pc)
- ○1.44M TEAC Floppy Drive
- ○540MB Quantum IDE LPS540A HD
- ○Fast 32Bit VLB IDE Controller with 2S/1P/1G
- ○Diamond Stealth 32 PCI 2MB Accelerator
- ○KFC 14" 1024X768NI 0.28DP Monitor
- ○Premium Digital Mini Tower 230W PS
- ○Honeywell 101 Enhanced Keyboard

50DX2-$1343
66DX2-$1364
100DX4-$1682

Dare to Compare

[illegible]

- Processor............	38.70
- Video..................	4314.47
- Disk.....................	1192.00
DOSMark..............	635.87
Graphics WinMark..	12.00
Disk WinMark.........	923

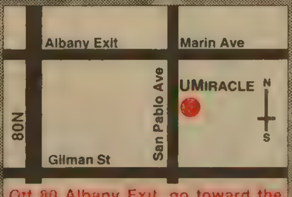
Test result based on our 66MHz system. See your PC Magazine for comparsion.

Our Service, Our Commitment

- All complete systems are assembled, jumpers and switches setup/configured, DOS V6.22, Windows V3.1 and all included software installed and tested, high resolution video monitor mode tested and continously burned in for 48 hours on all components and finally interactively inspected for trouble-free operation. All systems are to be visual inspected by customer at pick up time.
- Systems marked with "READY-TO-GO" have been pre-built, burn-in tested and are ready to be picked up or delivered within 30 minutes IN FREMONT MAIN OFFICE - Please allow more time for minor configuration changes. Standard delivery time is 72hours.
- Free delivery area includes local area within 30 minute driving distance. No delivery on weekends. Delivery out of local area will be charged up to $30 freight.
- Most components come with over 1 year manufacturer warranty - First year will be covered by UMiracle. Warranty after the first year will be covered by component manufacturers.
- While-you-wait immediate service should there be any neccessary warranty repair. If we couldn't solve the problem, another system will be built (at our discretion, if purchased within 30 days.)
- All pickups, repairs, exchanges, upgrades can be done in either Fremont or Albany stores. Original invoices & records required.

Call 510-526-0271

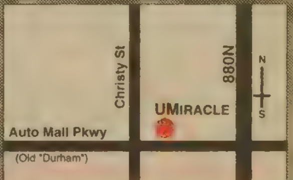
ALBANY BRANCH STORE:
1027 San Pablo Ave. Albany CA 94706
Phone: 510-526-0271 Fax: 510-526-0273
Mon to Sat 9:30AM-7:00PM
Closed on Sunday



Off 80 Albany Exit, go toward the hill and turn right on San Pablo Avenue, We are facing U.C.Village. Or off 80 Gilman St, go toward the hill and make left turn on San Pablo Avenue.

Call 510-226-6746

FREMONT MAIN OFFICE:
43038 Christy St. Fremont CA 94538
Phone: 510-226-6746 Fax: 510-226-6758
Mon to Sat 9:00AM-7:00PM
Sunday 10:00AM-6:00PM
Yes! Open on Sunday!



Off 880 Auto Mall Pkwy, (or if off 68 Durham, go west and pass the over-pass) right on second light, we are inside Lincoln Executive Center, the first business park on your right.

COMPONENTS/UPGRADES

Add and subtract to make your dream machine!

Add and subtract to make your dream machine!

Motherboard without CPU: (Call for CPU Prices)

486 AIR-SH ISA VLB 256K - 3 VLB slots, Upto 32MB by 30Pin, ZIF, P5 OD support, Bus-master, Power Saving Mgmt, U.S. Quality	$100
486 UMiracle Green ISA VLB 256K - 3 VLB, upto 128MB, 1MB Cache, Support 30 & 72Pin SIMM, P5 OD suppt, ZIP, Bus-master, Full Deep Green PC EPA compliance - shut off HD, Green Monitor, CPU Slow Dn, etc , AMI BIOS, Optional 3.3V regulator for 100DX/4	**$140**
486 AIR-MI ISA VLB 256K - 3 VLB slots, Upto 128MB by 72Pin, ZIF, P5 OD support, Bus-master, VLB IDE, FD, 2S/P/G, Power Saving Mgmt, U.S.Quality	$165
486 AIR-MIS ISA VLB 256K - 2 VLB slots, Upto 64MB by 72Pin, ZIF, P5 OD Support, Bus-master, VLB IDE, FD, 2S/1P & VLB SCSI-2 w/ Adaptec 6360 chipset, and EZ-SCSI software driver,U.S.Quality	$210
486 AIR-EI Full EISA VLB - 3 VLB Slots, Upto 256MB by 72Pin SIMM, ZIF, P5 OD Support, Bus-master, 8 EISA/3 VLB slots, U.S.Quality, 256/512K	$300/380
486 ISA PCI/VLB - 4 PCI, 4 ISA/2 VLB Slots, P5 OD Support, Upto 128MB by 30 & 72Pin SIMM, Bus-master, EPA Green PC compliance, support 3.3V 100DX/4, AMI BIOS, 256K/512K	**$160/240**
P5 Pentium PCI 60/66MHz- 4 PCI, 4 ISA Slots, ZIF, Intel Mercury ChipSet, Upto 128MB by 72Pin SIMM, Bus-master, Dallas onboard Battery, Phoenix BIOS, onbrd PCI NCR SCSI-2 Controller, Complete drivers for OS/2, NT,UNIX, 256K/512K	$340/420
Intel Premiere PCI II 90/100MHz 256K, suppt 72Pin SIMM, bulit-in PCI-IDE, FD, 2 hi-spd Serials, 1 enhanced Parallel, support Enhanced IDE LBA Mode-3 Stndrd, support 4 IDE HDs. Intel Chipset, Ireland Made.	$395
SuperMicro P54VL-PCI 512K - 90/100MHz P5 suppt, ZIF, 4 PCI/2 VLB/5-16Bit ISA slots, Bus-master, Upto 128MB by 72Pin, Green PowerSaving, U.S. Made	$410
AIR P5 Pentium EISA PCI 512K - 90/100MHz P5 Suppt, ZIF, 3 PCI/4 EISA slots, Bus-master, Upto 128MB by 72Pin, AMI BIOS, 32-bit PCI bus-mastering SCSI ports using Adaptec AIC 7870 controller (equivialent to AHA-2940) supporting 50Pin Fast SCSI-2 & 68Pin Fast WIDE SCSI-2, onbrd floppy ports supporting 2.88MB, High speed 16550 UART com1 and com2 ports, bidirectional enhanced Parallel port, cables and complete OS software driver included	**$695**

CPU & Memory: (Prices Subject to Change Daily)

Pentium P5-90/100MHz 3.3V CPU	$Call
Pentium P5-60/66MHz CPU	$Call
Intel 486-33SX/33DX/50DX2/50DX/66DX2/100DX4.	$Call
AMD 486-40DX/50DX2/66DX2	$Call
Voltage Regulator 3.3V for 100DX/4	**$30**
8Kx8/32Kx8/64KX8/128Kx8 SRAM	$2/$5/$14/$32
1MB Video DRAM (44256-70ns DRAMx8pcs)	$40
1MB Video DRAM (256Kx16-70ns DRAMx2pcs)	$50
1MB Video VRAM (44256-70ns VRAMx8pcs)	$80
1MB Video VRAM (256Kx8-70ns VRAMx4pcs)	$100
1MB RAM SIMMs (256K-70ns SIMMx4pcs)	$48
4MB RAM SIMMs (1M-70ns SIMMx4pcs)	$Call
16MB RAM SIMMs (4M-70ns SIMMx4pcs)	$Call
72Pin 70ns RAM SIMM (4/8/16/32MB)	$Call

I/O Card/Controller Card/Network Card

Dual Parallel Printer Card	$18
8 Bit AT I/O 2S/1P/1G	$12
8 Bit AT I/O 2S/1P/1G w/ 2 HiSpd UART 16550's	$35
16 Bit IDE/4FD 2.88MB support	$25
16 Bit IDE/2FD with 2S/1P/1G	$13
16 Bit IDE/4FD with 2S/1P/1G 2.88MB support, HiSpd 16550 UART's on Serial ports	$35
VLB 32 Bit IDE/2FD Controller with 2S/1P/1G	$18
VLB 32 Bit IDE/2FD Controller Support 2.88MB, with 2 HiSpd UART 16550's, 1 Parallel	$40
Promise DC-4030VL-2 VLB IDE w/ 0MB Cache	$110
PCI IDE Controller, support 2 IDE HD's	$35
Adaptec 1542C Bus-master SCSI FD	$160
Adaptec 1542CK Bus-master SCSI FD w/ Kit	$230
Adaptec 2742T RISC-based EISA SCSI-2	$185
Adaptec 2742T RISC-based EISA SCSI-2 w/ Kit w/ Dual Channel supporting 14 HDs, 2.88M	$295
Adaptec 2842VL VLB-to-Fast SCSI-2 Controller w/ 2.88MB Support & Driver Kit	$235
Adaptec 2940 PCI Fast PCI SCSI-2 (Bare)	$195
Adaptec 2940 PCI Fast PCI SCSI-2 with Kit	$275
Adaptec 2940W PCI Fast WIDE SCSI-II, 20MB/s burst, 15 SCSI devices support,dual channel with 50 & 68Pin (w/o cable)Bare / Kit version	**$255/$335**
NCR 53C825 PCI Fast WIDE SCSI-2 68Pin & Fast SCSI-2 50Pin, Support 15 devices, 10MB/S Async, 20MB/S Sync, Complete NCR SDMS software driver	**$155**
AIR QAccess Fast SCSI-2 VLB Controller w/ Adaptec 6360 Chipset and EZ-SCSI Software w/ VLB IDE/FD and 2S/1P/1G	$125
External SCSI-2 Adapter for QAccess/MIS/Any Onboard internal SCSI interface	$30
Ethernet NE2000 Adapter Coaxial/10-Base T	$42
3COM Etherlink III - 3C509 16bit 10-baseT/Coax.	$119
3COM Etherlink III - 3C509 16bit Combo	$129
3COM Etherlink III - 3C579 EISA 32bit 10-baseT/Coaxial	$229

Video Card

16Bit 512K/1MB Trident SVGA 1024x768	$38/55
16Bit 1MB Tseng-4000 72Hz 32K Color	$68
Cirrus Logic 5428 VLB 1MB/2MB DRAM	$84/124
S3-805 VLB Windows Accelerator 1280x1024, 16.7Million Color	$95/135
Orchid Celsius VLB X15IIT 1MB/2MB VRAM	$125/205
Orchid Kevin 64 Cirrus Logic CL-GD5434 VLB or PCI version 1MB/2MB DRAM	$140/190
Tseng ET-4000W32I PCI 2MB DRAM	**$185**
Diamond Stealth 32 PCI/VLB Tseng-ET4000W32i Chipset 1/2MB DRAM	$165/205
Diamond Stealth 64 PCI/VLB 64Bit Graphic Engine S3-964 2MB/4MB VRAM	$320/465
Diamond Viper VLB/PCI 2MB VRAM Weitek Power 9000 Chipset	$299
Diamond Viper SE 64Bit Graphic Engine Weitek Power 9100 chpst 2MB/4MB VRAM	**$345/545**
Diamond Viper Pro 64Bit Graphic Engine Weitek Power 9100+9130 power accelerate chipset 2MB/4MB VRAM	**$445/645**
ATI Ultra Pro VLB/PCI Mach32 2MB VRAM	$260
ATI Graphic Pro Turbo PCI 2MB/4MB VRAM	$305/505
Matrox MGA II Plus PCI VRAM 2MB/4MB	$425/625
Matrox MGA II Plus PCI 2MB Upgrade Module	$200

Monitor

KFC 14" 1024x768NIx0.28DP	$230
KFC 14"1024x768NIx0.28DP Low Radiation MRPII	$250
KFC 14" Multisync 1024x768NIx0.28DP Digital-Control,Non-Glared	$300
KFC 15" Multisync 1280x1024NIx0.28DP Digital-Control,Non-Glared,Flat-Screen Green Pwr Saving, Screen Shape Contrl	$390
KFC 17" Multisync 1280x1024NIx0.26DP Digital-Control,Non-Glared,Flat-Screen Green Pwr Saving, Screen Shape Contrl	$730
MAG DX15F 15" Digital Control 30-64KHz, 1280x1024NI, upto 76Hz, .28DP, Green, MPRII, VESA DPMS	$370
MAG MX15F 15" Digital Control LED, 30-68KHz, 1280x1024NI, upto 76Hz, .28DP, Green, MPRII, VESA DPMS	$460
MAG DX17FG 17" Digital Control 30-64KHz, 1280x1024NI, upto 76Hz, .26DP, Green, MPRII, VESA DPMS	$665
MAG MX17FG 17" Digital Control 1280x1024NI, upto 76Hz, .28DP, Green, MPRII, VESA DPMS	$795
Viewsonic 15EX 15" 76Hz Green .28DP MPR-II Digital Control, Flat Screen	$370
Viewsonic 17G 17" Green W/on-Screen Cntrl	$765
Viewsonic 17 17" 0.28DP 1280x1024NI Digi.Cntl	$890
Viewsonic 20 20" 0.28DP 1600x1280NI Digi.Cntl	$1395
Viewsonic 21 21" 0.26DP 1600x1280NI Digi.Cntl	$1645
NEC 3FGe 15" 0.28DP 1024x768NI	$549
NEC 4FGe 15" 0.28DP 1024x768NI 76Hz	$629
NEC 5FGe 17" 0.28DP 1024x768NI	$949
NEC 5FGP 17" 0.28DP 1280x1024 OptiClear	$1075
NEC 6FGP 21" 0.28DP 1280x1024NI OptiClear	$1990
NEC Anti-Glare Filtering Lens	$Call

Modem

14.4K Fax/Data Internal Modem 16550 UART	$65
US Robotics Sportster 14.4K Data/Fax 16550UART V32.bis, V.32, V.42 Internal/External	$110/134
US Robotics Sportster 28.8K Data/Fax, 16550UART, Int. V.FC, V42.bis, Group III Fax, V32.bis, V.32, V.42	**$230**
Intel Fax Modem 14.4K Data/Fax 16550UART w/ Winfax Lite, Internal/External	$119/135

Floppy Drive/Tape Backup

Teac 1.2M 5.25"/1.44M 3.5"/2.88M 3.5"	$44/35/84
Teac Dual 1.44M & 1.2M Combo	$105
Colorado 250MB TapeBackup Internal	$155
3M Tape Cartridge DC2120 for 250MB QIC-80	$15
Conner SoftStor Anaconda 1.3GB 2750 SCSI-2 1/4" DAT Backup 36MB/Min Internal	$799
Conner SoftStor Anaconda 2.0GB 2800 SCSI-2 1/4" DAT Backup 36MB/Min Internal	$999
WangDAT Int. Tape Backup - 3100 DAT 2.0GB	**$899**
WangDAT Int. Tape Backup - 3200 DAT 4-8GB	**$999**
WangDAT Int. Tape Backup - 3400DX DAT 4-8GB.	**$999**

KeyBoard/Mice/Software/Chassis/PS/Misc

Honeywell 101 Enhanced Kybrd PS/2 or standrd.	$25
KeyTronic 101 Enhanced U.S. Made	$25
Focus 2001 101 Enhanced Click w/Cover	$32
Focus 8000 111 with Calculator	$40
Focus 9000 129 Programmable w/Calculator	$55
NorthGate OmniKey 101	$74
MS Compatible 3-Button Mouse	$8
Logitech Serial First Mouse	$20
Logitech Serial/Bus Mouseman	$30/65
Logitech Mouseman Cordless	$80
Logitech Ergonomic Trackman Combo	$80
MicroSoft Ergonomic Serial Mouse V2.0	$25
MS DOS 6.22/Windows V3.11	$45/45
Premium Case w/230W Mini/Desktop/Med	$60/65/85
Premium Case w/250W Full Size Tower	$105
Power Supply PS-II Type 230W	$32
486 CPU Cooling Fan with heat sink	$8
P5 60/66MHz CPU Cooling Fan w/heat sink	$13
P5 90/100MHz CPU Cooling Fan w/heat sink	$16
Chassis Second Cooling Fan 3" or 3.5"	$18
Printer Cable 10"/15"/25"	$7/9/16
Motherboard Crystal for 25/33/40/50/66/80MHz.	$5

CD-ROM Drive

Plextor CD-3028 SCSI-2 240ms, 330KB/Sec, Double-Spd Multi-Session Photo CD. internal	$255
Toshiba XM-3401B SCSI 256K Cache,200ms 330KB/Sec, Multi-Spin/Spd Internal	$255
NEC Triple Spd MultiSpin 3Xi Internal Orlginal	$425
NEC Triple Spd MultiSpin 3Xi Internal CDR-510	$345
Teac CD-55A SCSI-II Super Quad Speed, 195ms, 600Kb/sec, Mult-session, Photo-CD	**$495**
Plextor 4-Plex QuadSpeed PX-43CH 600Kb/sec, 220ms, 1MB Buffer, 2-yr warranty	**$475**
Panasonic CR-562 320ms - need no caddy	$145
Mitsumi DoubleSpeed 250ms. 300Kb/s, w/ contrl.	$139
16-bit CD-ROM Controller w/Software for Panasonic, Mitsumi, Sony	$25
150W Amplified MultiMedia PS-290 Speakers	$95
80W TopTek Amplified Stereo Speaker	$55
Media 690 Hi-Fi Amplified Stereo Speaker	$40
CD-ROM Caddy	$5
Audio Cable - CD-ROM to Sound Card	$5

Sound Card

Sound Blaster 16 Value	$98
Sound Blaster 16 SCSI	$149
Sound Blaster 16 SCSI with ASP	$179
Sound Blaster 16 MultiCD	$129
Sound Blaster 16 MultiCD with ASP	$159
Sound Blaster 32 AWE	$265

MultiMedia Package

Creative Labs Discovery CD 8 Upgrade Kit	$275
Creative Labs Discovery CD 16 Upgrade Kit	$329
Creative Labs Edutainment CD 16 Upgrade Kit	$379

HardDisk

Western Digital	
340MB IDE WDAC2340	$205
420MB IDE WDAC2420	$220
540MB IDE WDAC2540	$310
730MB IDE WD2700A - Enhanced IDE ATAPI	**$435**
1080MB IDE WD31000A - Enhanced IDE ATAPI	**$615**
Quantum	
270MB IDE LPS270A 128K 12ms	$205
340MB IDE LPS340A 128K 14ms	$225
540MB IDE LPS540A 128K 14ms	$295
540MB SCSI-2 LPS540S 128K 12ms	$325
1.08GB Fast SCSI-3 Empire Series 1080S 512K 3.5".	$620
1.4GB Fast SCSI-3 Empire Series 1400S 512K 3.5".	**$880**
2.1GB Fast SCSI-3 Empire Series 2100S 512K 3.5".	**$1205**
Micropolis	
1.0GB IDE MC2210A 10MS 5400RPM	$659
1.0GB SCSI MC2210 10MS 5400RPM	$719
1.05GB SCSI MC4110 8.5MS 5400RPM	$649
1.75GB SCSI MC2217 10MS 5400RPM	$889
2.0GB SCSI MC1926 11MS 5400RPM FH	$1389
3.0GB SCSI MC1936 11MS 5400RPM FH	$1989

FAST WIDE SCSI-2 HARD DISK (68Pin Connection)

Fujitsu M2694EQA 1.08GB Fast Wide SCSI-2	**$759**
Micropolis MC2217DW 1.75GB Fast Wide SCSI-2	**$1295**
Seagate ST12550W 2.1GB Fast Wide SCSI-2	**$1785**
Seagate ST43401W 2.9GB Fast Wide SCSI-2	**$2195**
FAST WIDE SCSI-2 internal Ribbon Cable 3 connector 18" high density, 68Pin	**$70**

PC Upgrades and Service Welcome
Our Technical Staff can Troubleshoot
and Pinpoint your Problem Fast!

UMiracle

UMIRACLE MICROSYSTEMS
43038 Christy Street Fremont CA 94538
Phone: 510-226-6746 Fax: 510-226-6758
1027 San Pablo Ave Albany CA 94706
Phone: 510-526-0271 Fax: 510-526-0273

** [illegible] indicate new items we have added   * Red prices indicate newly lowered prices

OVER THREE HUNDRED NEW CD-TITLES!

AT NEW LOWEST PRICES FOR YOUR SELECTION!

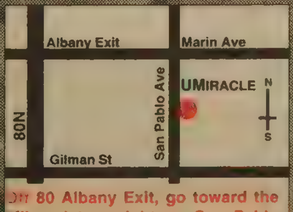
Multimedia CD Titles

No.	Description	Price
004	MS BOOKSHELF 1994	$44
009	ARTHUR'S TEACHER TROUBLE	$15
013	MIXED UP MOTHER GOOSE	$10
014	CARMEN SAN DIEGO - DELUXE	$17
015	JONES IN THE FAST LANE	$13
016	PLAYING W/ LANGUAGES - ENGLISH	$15
018	MARIO'S MISSING/ WORLD ATLAS	$15
019	MAYO CLINIC FAMILY HEALTH BK	$15
020	NATIONAL GEOGRAPHIC MAMMALS	$17
024	SPACE QUEST IV	$9.50
025	STELLAR SEVEN	$10
026	ALL BEAUTIES****	$20
032	ADVENTURE OF WILLY BEAMISH	$13
033	AIRCRAFT ENCYCLOPEDIA	$28
036	ANIMALS ENCYCLOPEDIA MPC	$18
038	ARIS JETS & PROPS 2 DISKS	$15
039	ARIS WILD PLACES	$13
040	ARIS WIZARD TEST AND TUNE UP	$13
043	AUDUBON MAMMALS	$12
048	BRAIN DRAIN	$15
050	BUSINESS BACKGROUND	$19
052	CALIFORNIA COLLECTION	$12
054	CHESS MANIA	$39
055	CICA WINDOWS	$13
056	CINEMANIA BY MS	$40
057	CLIP ART HEAVEN	$14
058	CLIPART GOLIATH	$13
060	COMPLETE BOOK SHOP	$13
065	CROSSWORD CRACKER	$22
067	DINASOUR ADVERTURE	$18
073	FAMILY CHOICE	$15
076	FAMILY EDUCATION COLLECTION	$19
079	FUTURA GAMES	$13
080	GAME MASTER	$17
081	GAME PAK III (CHALLENGE PAK)	$16
084	GREAT CITIES VOL. 1.0 & VOL.2.0	$13
086	GUINESS DISC MPC 1993	$19
088	INDIANA JONES FATE ATLANTIS	$18
091	KODAK PHOTO ACCESS	$15
092	LET'S PLAY	$15
094	LOOM	$12
097	MANHOLE	$34
099	MAVIS BEACON TYPING 2.0 MPC	$14
101	MIRROR MIRROR	$15
102	MONKEY ISLAND - ENGLISH	$13
104	NATIONAL PARKS	$17
108	OLDIES BUT GOODIES	$15
109	OS/2 ARCHIVES	$15
110	OUR SOLAR SYSTEM	$14
117	PLAYING W/ LANG/FRENCH	$15
118	PLAYING W/ LANG/GERMAN	$15
119	PLAYING W/ LANG /JAPANESE	$15
120	PLAYING W/ LANG/SPANISH	$15
122	PROGRAMMER'S ROM	$27
125	SAN DIEGO ZOO/ANIMALS	$12
126	SECRET WEAPON OF LUFTWAFFE	$14
127	THE SEVENTH GUEST - VIRGIN	$19
131	SHAREWARE GOLD VOL 2.0	$43
138	SIMTEL MSDOS SHAREWARE	$15
139	SO MUCH SCREENWARE	$24
142	SPEEDWAY	$59
143	STORYTIME	$15
145	SWIMWEAR 1993****	$17
147	TERRORIST GROUP PROFILES	$35
152	U.S. ATLAS - PRESIDENTS	$22
154	U.S. HISTORY	$14
155	U.S. WORLD ATLAS PACK	$17
156	U.S.A. STATE FACT BOOK	$31
157	VARIETY STORE	$13
161	WORLD ATLAS MPC	$14
162	WORLD OF FLIGHT	~$26
167	BEST OF VIVID****	$35
178	SOUTHERN BEAUTIES****	$38
188	AFTER DARK TRILOGY****	$38
189	LEGEND OF KAMASUTA****	$38
191	DIGITAL DREAMS****	$29
192	BUSTING OUT BY VIVID****	$29
193	LOTUS 123 WIN SHAREWARE	$45
194	MS WINDOWS 3.1 SHAREWARE	$49
195	KEY FONTS PRO	$65
196	MS WORKS FOR WINDOWS	$19
198	SO MUCH SHAREWARE III	$19
199	WHO KILLED SAM RUPERT	$18
201	MANIAC MANSION DAY - TENTAC	$24
202	COMPTON'S INTERACTIVE ENCYC.	$27
204	SUPER FONTS	$16
205	DR. FUN PAK	$9
206	DR. GAMES VOL.1	$9
207	DR. MUSIC VOL.1	$9
208	DR. SHAREWARE VOL.1	$9
209	DR. WINDOWS SHAREWARE VOL.1	$9
210	BATTLE CHESS ENHANCED	$19
211	RETURN TO ZORK	$19
212	ELVIS KARAOKE	$16
213	BUSTY OF BABES VOL. 2	$29
214	KINGS QUEST VI	$18
215	JUST GRANDMA AND ME	$18
216	ECOQUEST	$22
217	DAGGER OF AMON RA	$23
218	STAR WARS CHESS	$19
220	ADVENTURES IN HEAVEN	$17
221	BIBLE LIBRARY BY KING JAMES	$22
223	CAL.HAWALL GOLF GUIDE & GAME	$18
224	CHAOS AND FRACTULES	$28
225	COOKBOOK HEAVEN	$14
227	CHESS MANIA	$39
228	DESKTOP PUBLISHER DREAM DISK	$25
229	DR. GAMES FOR WINDOWS	$9
230	DUNE	$22
233	F117A STEALTH FIGHTER	$25
234	FONT FUNHOUSE	$23
236	FRESH ARTE	$28
237	FUN HOUSE	$22
239	GAMES EXPERT FOR WINDOWS	$9
240	GREAT WONDERS OF THE WORLD	$19
242	GUY SPY	$23
243	HACKER CHRONICIES	$25
244	HAM RADIO QRZI	$15
245	INCA	$19
246	LEARNING HEAVEN	$16
247	LEGEND OF KYRANDIA	$24
248	MAD DOG McCREE	$26
250	MONEY,MONEY,MONEY	$18
252	OCEAN BELOW	$15
253	OFFICER'S BOOKCASE	$29
258	PUBLIQUE ART	$20
259	PUBLISHER'S PARADISE	$24
261	STRAIGHT FROM HEAVEN	$19
264	STW GROLIER'S ENCYCLOPEDIA 6.0	$25
265	SUPER CLIPART	$16
267	SUPER GAMES FOR DOS	$9
268	SUPER GAMES FOR WINDOWS	$9
269	SUPER PROGRAMMER	$18
270	SUPER SHAREWARE LIBRARY	$15
271	SUPER SHEREWARE LIBRARY II	$17
273	SUPER WINDOWS SHAREWARE II	$18
275	U.S. ATLAS	$15
276	U.S. PRESIDENTS	$23
277	VGA SPECTRUM	$23
278	WINDOWS MASTER	$19
279	WINDOWS PLATINUM	$11
280	ADULT PALATE****	$25
282	DIGITAL DANCING INTERACTIVE****	$34
283	DIRTY TALK****	$28
285	GORLS OF J.STEPHEN HICKS****	$34
286	HIGH VOLUME NUDES****	$34
287	L.A. STRIPPERS****	$43
288	LEGENDS OF PORN****	$34
289	MYSTIC OF THE ORIENT****	$35
290	NEW MACHINE SAMPLER****	$19
291	NEW WAVE HOOKERS****	$30
292	NIGHT WATCH INTERACTIVE****	$45
293	PHONE SEX-WINDOWS****	$19
294	PHOTO GROUP I	$25
295	Q69****	$39
297	TRACY LORDS I LOVE YOU****	$32
299	WICKED-THE MOVIE****	$39
301	SHAREWARE HEAVEN	$17
303	PC SIG 13 SHAREWARE	$22
305	IRON HELIX	$21
306	BODACIOUS BEAUTIES****	$30
307	PUTT-PUTT JOINS THE PARADE	$17
308	FATTY BEAR B-DAY SURPRIS	$18
309	MS MULTIMEDIA PACK	$42
312	LOADS OF FUN	$27
313	BLOOOPERS****	$28
314	CHESSMASTER 4000/LIFE	$19
315	DINOSAUR SAFARI	$19
316	FAMILY DOCTOR III W/ VIDEO	$20
317	PINACOTHECA PC MULTIMEDIA	$18
318	MOZART BOOK	$18
320	THE LAST DINASOUR	$16
321	UFO DOS VERSION	$21
322	KID'S ZOO UNDERSEA ADVENTURE	$19
323	MAGIC DEATH	$16
324	SQUIRT CITY VOL. 1****	$21
325	COLLEGE GIRLS****	$28
326	GARDENING	$17
327	FLY FISHING	$19
328	NAUTILUS MULTIMEDIA MAGAZINE	$25
329	SUPER SHAREWARE III	$13
339	HIDDEN OBSESSIONS****	$35
371	COMPTION'S NEW CENTURY ENCY V2	$23
372	ALLIUM****	$19
373	TULIP****	$19
374	SWEETWILL****	$19
375	IMAGE WORLD I	$12
376	IMAGE WORLD II	$12
377	IMAGE WORLD III	$12
378	JURASSIC PARK SCREEN SAVER	$18
379	DINOSAUR ADV 3-D W/GLASSES	$17
380	DR. CLIP ARTS	$11
381	DR. FONT EXPERT	$11
382	DR. GRAPHICS	$11
383	HARD DAY'S NIGHT	$15
384	AMERICA ALIVE	$14
385	ASIA ALIVE	$14
386	EUROPEAN ALIVE	$14
387	CYBERRACE	$19
388	JUTLAND	$24
390	SO MUCH SHAREWARE IV	$17
391	PARENTING	$18
392	GUS GOES TO CYBERTOWN	$16
394	FATTY BEAR COMBO FUN PACK	$16
396	ENCRATA BY MICROSOFT	$52
398	BUTTMAN'S EUROPEAN VACATFT	$31
399	SCISSORS AND STONES	$43
400	101 ONLY BEST GAMES VOL.1	$15
401	20TH CENTURY VIDEO ALMANAC	$18
402	AUTO REGISTERY 1994	$21
403	BUSINESS LIBRARY	$16
404	C.H.A.O.S. CONTINUUM	$19
405	DR. T'S SING-A-LONG	$13
406	DR. MUSIC LAB I	$11
407	QUANTUM GATE	$19
408	WIGGINS IN STORYLAND	$21
409	FOREVER GROWING GARDEN	$21
412	GABRIEL KNIGHTS-SINS/FATHE	$23
414	LANGUAGE OF THE WORLD	$24
416	ASIAN GIRLS****	$28
417	3D-BEAUTY****	$30
418	MEN'S CLUB****	$15
419	PINK LADY****	$15
420	LA TRAVIATA-X****	$15
421	SAKURA-X****	$14
422	ORIENTAL HOT NIGHT I-X****	$14
423	ORIENTAL HOT NIGHT II-X****	$14
424	OBSESSION-MPEG****	$20
425	TABOO '92-MPEG****	$20
426	PORKY PIG****	$14
427	GODZILLA VS. MEGALON****	$14
428	BETTY BOOP****	$14
429	NIGHT OF THE LIVING DEAD****	$15
430	CLASSIC CARTOONS	$15
431	BUGG BUNNY	$15
432	HILARIOUS SPORTS BLOOPERS	$15
434	CARICATURAS CLASICAS	$15
436	AMERICAN GIRLS II****	$38
437	MS GOLF	$30
439	NEW WAVE HOOKERS II****	$45
441	EROTIC ENCOUNTERS	$36
442	ASIAN LADIES****	$45
444	MADDAM'S FAMILY****	$40
445	ANIMAL ALPHAPET	$24
446	JAZZ MULTIMEDIA HISTORY	$19
447	TIME LAPSE	$15
448	PRETTY BABY****	$14
449	DINOSAURS OF MICROSOFT	$43
450	PLANET X INTERACTIVE X-RAT****	$31
452	HOT SHORTY****	$21
453	ANAI VISION 1****	$21
454	ANAI VISION 2****	$21
455	101-OD1****	$20
456	101-OD2****	$20
457	ET-NITE****	$20
458	FANTASY****	$20
459	MEGA RACE	$19
460	LAWNMOWER MAN	$16
461	DARK SEED	$18
462	CALIFORNIA BEAUTIES****	$34
463	11 MILLION BUSINESSES PHONE DIRECTORY	$19

Call 510-526-0271

ALBANY BRANCH STORE:
1027 San Pablo Ave. Albany CA 94706
Phone: 510-526-0271 Fax: 510-526-0273
Mon to Sat 9:30AM-7:00PM
Closed on Sunday

VISA MasterCard Discover ATM

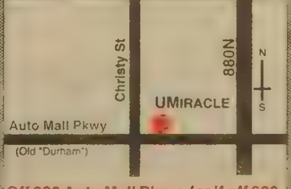


Off 80 Albany Exit, go toward the hill and turn right on San Pablo Avenue, We are facing U.C. Village. Or off 80 Gilman St, go toward the hill and make left turn on San Pablo Avenue.

Call 510-226-6746

FREMONT MAIN OFFICE:
43038 Christy St. Fremont CA 94538
Phone: 510-226-6746 Fax: 510-226-6758
Mon to Sat 9:00AM-7:00PM
Sunday 10:00AM-6:00PM
Yes! Open on Sunday!

VISA MasterCard Discover



Off 880 Auto Mall Pkwy, (or if off 680 Durham, go west and pass the 880 over-pass), right on second light we are inside Lincoln Executive Center, the first business park on your right.

Faxing From The Internet, Part II

BY KEVIN SAVETZ

In February (issue no. 119) I examined a relatively new service that lets you send a fax by electronic mail. Yes, this service lets you send a fax without using a facsimile machine or even a fax modem. Since that original article, I have discovered a variety of other email-to-fax services. Although this was not intended to be a mini-series, welcome to Part Two of Faxing from the Internet.

Indeed, there are several options for sending a fax via Internet mail; some are free, while others are pay services. At least one service even lets you receive a fax via Internet mail.

TPC.INT Remote Printing (redux)

The fax-from-the-Internet service I originally examined was the brainchild of Carl Malamud (the creator of Internet Talk Radio) and Marshall Rose. They have been doing research on how to integrate special-purpose devices, like facsimile printers, into the fabric of the Internet. It works simply enough—send electronic mail to a special address, and soon after (if your recipient's fax machine is in a covered area), out comes a freshly-minted fax. You can send a fax to multiple fax machines, or even a combination of faxes and traditional email recipients. After the deed is done, you will receive electronic mail telling you if your fax was successfully sent or not. The service is free. Currently, however, this service does not let you send a fax anywhere.

A variety of companies, institutions, and citizens linked to the Internet have joined the experiment by linking a computer and fax modem to the net. When an organization joins as a remote-fax server, it specifies what areas to which they are willing to send faxes. As you might expect, the phone number of the recipient's fax machine becomes are of the email address. A computer looks at the address and decides if any participating fax machines cover the area to which you want to send a fax. If so, your message is routed to the appropriate server. Otherwise, you will receive electronic mail informing you the fax couldn't be delivered.

To send a fax by email, send a message

To: remote-printer.<info>@phonenumber.iddd.tpc.int

Where <info> contains information for the cover page. In <info>, "/" is turned into line breaks and "_" is turned into spaces. For example, the address:

To: remote printer.Arlo_Cats/Room_123@<1202XXX1212>.iddd.tpc.int

Would send a fax to +1-202-XXX-1212 with

continued on page 314

TOWER COMPUTER.

Pentium PCI Series

- Motherboard w/CPU 256K Cache
- 4Mb Ram installed
- IDE-PCI controller 2 Ser, 1Par
- Teac 1.2Mb & 1.44Mb Floppy Drive
- IDE 540Mb Hard Drive
- PCI Window Accelerator video w/1Mb
- 15" Flat screen 1280x1024.28 NI monitor
- KeyTronic 101 Enhanced keyboard
- Microsoft serial mouse
- Mid size Tower case 230w PS.
- 72 Hr Burn-in & Testing.

P5-66Mhz $2288 / P5-90Mhz $2498

Pentium VLB Series

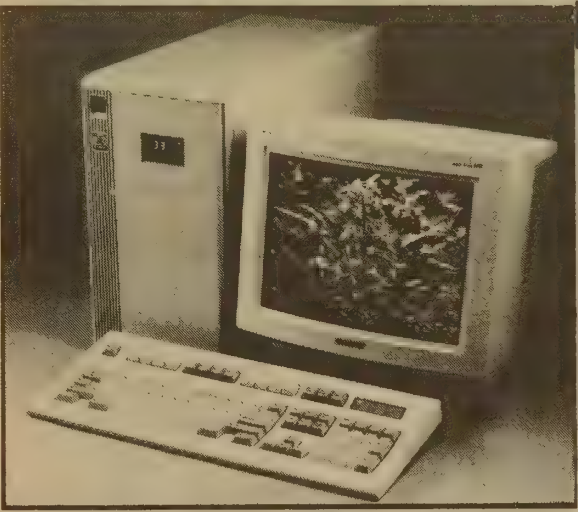
- Motherboard w/CPU 256K Cache
- 4Mb Ram installed
- IDE-VLB controller 2 Ser, 1Par
- Teac 1.2Mb & 1.44Mb Floppy Drive
- IDE 540Mb Hard Drive
- VLB Window Accelerator video w/1Mb
- 15" Flat screen 1280x1024.28 NI monitor
- KeyTronic 101 Enhanced keyboard
- Microsoft serial mouse
- Mid size Tower case 230w PS.
- 72 Hr Burn-in & Testing.

P5-66Mhz $2138 / P5-90Mhz $2498

Multimedia System Series

* Motherboard with 256K Cache
* Intel CPU P-5 / Intel 486 CPU
* Standard 4Mb RAM installed
* IDE-VLB or IDE-PCI controller
* 2 Ser, 1Par, 1Game port
* Teac 1.2Mb and 1.44Mb F/D
* 420Mb IDE hard drive
* Window Aceel video card 1Mb
* 14" Monitor 1024x768 .28mm
* Sony / Panasonic CD-ROM
* 16 Bit sound card
* 25W amplifier speakers
* 5 CD-Tiles software
* MS-DOS 6.2 & Window 3.1
* MS ergonomic ser mouse
* 102 ergonomic Keyboard
* Mid Tower case 230W P.S

486SX-VLB-33MHz	**$1228**
486DX-VLB-40MHz	**$1388**
486DX-VLB-66MHz	**$1588**
PENTIUM-60MHz	**$2398**
PENTIUM-66MHz	**$2448**
PENTIUM-90MHz	**$2728**



**** Customized Configuration Available***
**** Maximum 12 Hr Turn-Around for Services***
**** 5 Years on Labor & 1 Year Parts***
**** 72-Hr burn-in & Testing before delivery***
**** Purchase Orders Welcomed***
**** 30 Day money back guarantee***
For system incompatiblity
**** 90 Days Same AS Cash***
**** Save 3% on Cash Purchases***
**** Prices subject to change w/o notice***

486 VLB/PCI Series

- Motherboard w/CPU 256K Cache
- 4Mb Ram installed
- IDE-controller 2 Ser, 1Par
- Teac 1.2Mb & 1.44Mb Floppy Drive
- IDE 270Mb Hard Drive
- Window Accelerator video w/1Mb
- 14" 1024x768.28mm monitor
- KeyTronic 101 Enhanced keyboard
- Microsoft comp Mouse
- Mini Tower Case w/230W Ps.
- 1 Year Parts & 5 Years Labor

486SX-33MHZ-VLB	**$1068**
486DX-40MHz-VLB	**$1168**
486DX2-50MHz-VLB	**$1238**
486DX2-66MHz-VLB	**$1298**
PENTIUM-60MHz-VLB	**$2238**
PENTIUM-66MHz-VLB	**$2368**
PENTIUM-90MHz-VLB	**$2738**

Add $90 for 486 PCI
Add $110 for Pentium PCI

HARD DRIVE /CD-ROMS

CONNER

170Mb IDE 17Ms	$178
210Mb IDE 15Ms	$188
245Mb IDE 15Ms	$218
340Mb IDE 12Ms	$238
540Mb IDE Fast	$348

MAXTOR

130Mb IDE 7131A	$178
210Mb IDE 7213A	$188
245Mb IDE 7245A	$218
340Mb IDE 7345A	$248
540Mb IDE Fast	$338

QUANTUM

170Mb IDE 17Ms	$198
270Mb IDE 15Ms	$228
340Mb IDE 12Ms	$268
540Mb IDE Fast	$328
1.4Gb SCSI	$828

WESTERN DIGITAL

210Mb IDE-WD 1210	$198
250Mb IDE-WD 2250	$218
345Mb IDE-WD 2340	$238
425Mb IDE-WD 2420	$278
540Mb IDE-WD 2540	$368

FLOPPY DRIVE

Teac 1.2Mb 5.25"	$45
Teac 1.44Mb 3.5"	$42
Toshiba 2.88Mb 3.5"	$65

CD-ROM

Panasonic Dual Speed	$158
Mitsumi Dual Speed	$160
Sony Dual Speed	$158
Texel DM-3028 SCSI	$258
Toshiba 3401-B SCSI	$298
NEC 3XI Triple Speed	$368

TAPE BACKUP

Colorado DJ-20 250Mb Int.	$165
Conner 250Mb Int.	$175
Coner Viper 2150S SCSI	$218

GRAPHIC CARDS

ATI

Ultra Pro W/2Mb Vram-VLB	$288
Ultra Pro W/2Mb Vram-PCI	$298
Ultra Pro 64 W/2Mb Vram-PCI	$398

DIAMOND

Stealth 32-PCI W/2Mb	$235
Stealth 32-VLB W/2Mb	$225
Viper P-9000 W/2Mb VLB	$338
Viper P-9000 W/2Mb PCI	$348

NUMBER NINE

GXe -10 W/1Mb ISA	$258
GXe -11 W/2Mb VLB	$335
GXe -12 W/3Mb VLB	$395
GXe -14 W/4Mb	$638

ORCHID

Celcius VLB W/1Mb	$138
Fahrenheit 1280 VLB W/1Mb	$158
Kelvin W/1Mb VLB	$165
Kelvin W/1Mb PCI	$168

SPIDER

Spider W/1Mb VLB	$85
Spider Plus W/1Mb VLB	$95
Spider Black Widow	$168
Spider 64 W/1Mb PCI	$188

OTHERS

S-Vga W/512Kb	$38
Logic Circus 1Mb	$78
ET-4000 W/1Mb	$68
Win Acc VLB 1Mb (Trident)	$75
Windows Acc VLB 1MB	$78

SCANNERS

LOGITECH

Scanman Easy Touch W/OCR	$189
Scanman 256 W/Ommi page	$188
Scanman color W/Ommi,OCR	$355
Others Vendor Call	$$$$

MONITORS

MULTISCAN

14" 1024x768 .39mm	$188
14" 1024x768 .28mm	$218
14" 1024x768 .28mm NI	$248
15" 1280x1024 .28mm NI	$358

VIEWSONIC

4E 14" 1024x768 .28mm	$278
6E 14" 1024x768 .28mm	$298
5E+ 14" 1024x768 .25mm NI	$478
15" EX-1280x1024 .28mm NI	$408
17" 1280x1024 .28mm NI	$968
20" 1600x1280 .28mm NI	$1568

SONY

15" 15 SF 1280x1024	$498
17" 1730S 1024x768	$948
17" 17SE 1600x1280	$1098

NEC

3 FGe 15" .28mm NI	$568
5 FGe 17" .28mm NI	$958
5 FGp 17" 1280x1024	$1128
6 FGp 21" 1280x1024	$1998

NANAO

F340 iw 15" .28mm NI	$638
F550 iw 17" 1280x1024.28mm.	$988
F560 iw 17" 1280x1024.25mm	$1208
T660 iw 20" 1280x1024.31mm	$1990
F760 iw 21" 1280x1024.28mm	$1918

SAMPO

15"1280x1024 .28mm NI	$358
17"1280x1024 .28mm NI	$698

MAG

15" MX-15FG	$468
17" MX-17FG	$795
Others Call	$$$$

ACCESSORIES

FAX-MODEM

14.4K Fax-Modem	$98
28.8K Fax-Modem	$138
14.4K Fax-Modem w/voice	$118
Intel 9600 Fax-Modem	$109
Intel PCMCIA 14.4K	$260
Us Robotic 16.8K	$430
Us Robotic Sportster 14.4K	$108

KEYBOARD

BTC 101 Key	$25
Chicony 101 Key	$25
Focus 2001	$42
Focus 9000	$58
Northgate 102 Key	$69
Northgate Ultra	$95
KeyTronic 101 Key	$35
Maxi SW 101 Key.	$38
Maxi SW 124 Key	$65

SOUND-CARDS

Sound Blaster Pro 16	$158
Sound Blaster 16 SCSI-II	$165
Audio Pro 16	$95
Audio Pro 16 Studio	$115
ISP 16	$90

CASES

Mini Tower W/200W	$55
Baby AT Case W/200W	$55
Mid Size Tower W/230W	$75
Full Size Tower W/250W	$115
Super Tower W/275W	$315

OTHERS

CPU Cooling Fan	$12
Pentium Cooling Fan	$20
Stereo Speakers 5W	$10
Stereo Speakers 25W	$39
Stereo Speakers 80W	$58
Power Centre	$19
Keyboard Under Drawer	$19
Others Call	$$$

TOWER COMPUTER SALES & SERVICE. TEL 408-288-6937 FAX 288-7120

1373 So. Bascom Ave San Jose, CA 95128

We Accept VISA - MASTER CARD & DISCOVER CARD, Store Hours: Monday - Friday 9:00 - 6:30PM, Sat 10:00 - 5PM

Anniversary Celebration Sale!

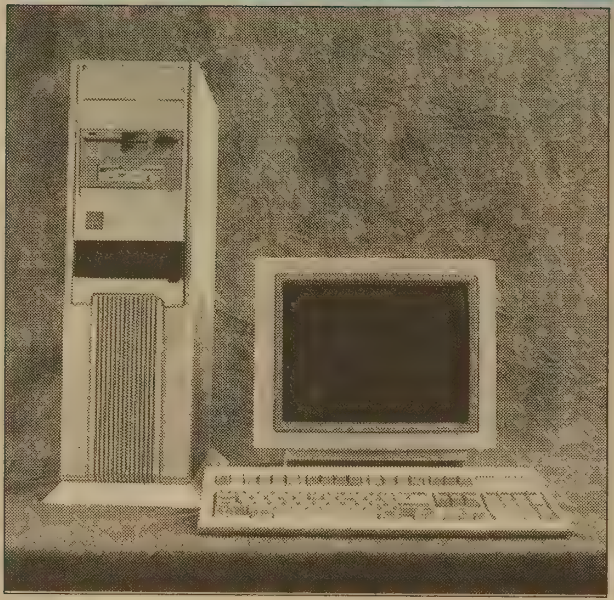
8th year ANNIVERSARY Special

ACCESS COMPUTER TECHNOLOGIES

MS-OFFICE WINDOWS PROFESSIONAL

$399 [illegible]

W/ ANY COMPLETE SYSTEM PURCHASE



FREE **AC-LINE CONDITIONER!**
With any complete Pentium system purchase, receive one 300VA AC-Line Conditioner **FREE!**

(Limit one per customer)

$59.00 Value!

FREE **MS-BALLPOINT MOUSE!**
With any notebook purchase, receive one Microsoft Ballpoint Mouse **FREE!**

$19.99 Value!

(Limit one per customer)

FREE **COMPUTER CLEANING KIT!**
With any complete 486 system purchase, receive one cleaning kit **FREE!**

$8.99 Value!

(Limit one per customer)

90MHz Pentium PCI/VLB

- Pentium PCI Motherboard
- 8MB RAM expandable to 128MB
- Intel Pentium 90MHz processor
- 512K Cache memory
- Dual media floppy drive
- 4 PCI, 2 VLB, 5 ISA slots
- PCI IDE Controller card
- 2 serial, 1 parallel & 1 game port
- Medium tower case
- 101-key enhanced keyboard
- 1 year parts and labor warranty

$1699

90MHz Pentium VLB

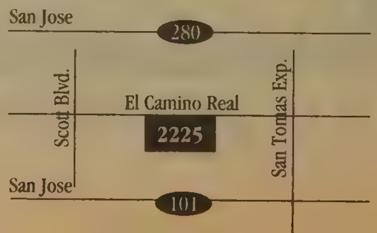
- Pentium PCI Motherboard
- 8MB RAM expandable to 128MB
- Intel Pentium 90MHz processor
- 512K Cache memory
- Dual media floppy drive
- 3 VLB, 8 ISA slots
- VLB IDE Controller card
- 2 serial, 1 parallel & 1 game port
- Medium tower case
- 101-key enhanced keyboard
- 1 year parts and labor warranty

$1595

TORE HOURS
M-F: 9 - 8
at - Sun: 10 - 5
Pacific Time)

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050

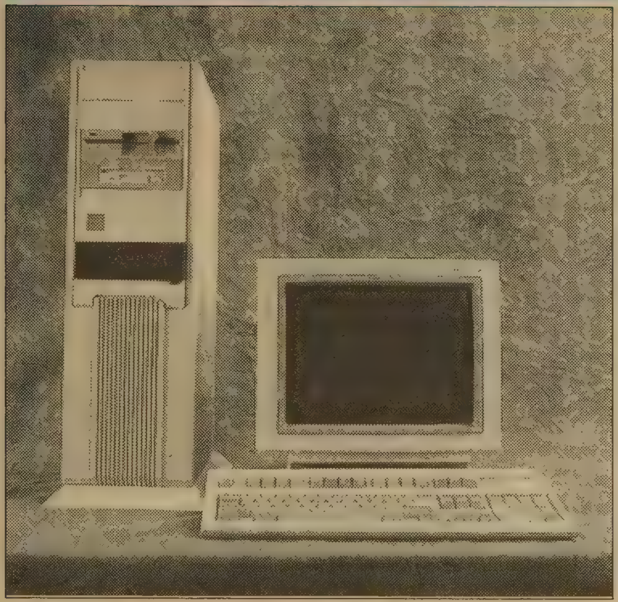


Anniversary Celebration Sale!

MS-OFFICE WINDOWS PROFESSIONAL

$399 [illegible]

W/ ANY COMPLETE SYSTEM PURCHASE



GENOA VESA Local Bus

- GENOA 486VL Motherboard
- 4MB RAM expandable to 32MB
- AMD DX2-66MHz processor
- 256K Cache memory
- 3 32-bit VLB expansion slots
- 3.5" 1.44MB floppy drive
- VLB IDE HD/FD controller
- 2 serial, 1 parallel & 1 game port
- Mid Tower with power supply
- 101-key enhanced keyboard

$629

*FREE Cleaning Kit!
w/ any complete system purchase

Monitors

SONY

15sf	15"	1280x1024	$449.00
17se	17"	1600x1280	949.00

NEC

2V	14"	1024x768	299.00*
3V	15"	1024x768	399.00*
3FGe	15"	1024x768	539.00
EPSON	14"	SVGA	219.00
ABONITE	14"	VGA	149.00
MITAC	15"	1280x1024	299.99
NANAO	17"	1280x1024	889.00

**Price after rebate, 9/31/94*

Printers

HEWLETT PACKARD

DeskJet

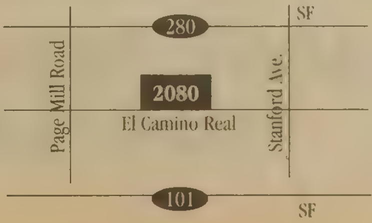
310-Portable Ink Jet	$299.00
310-Portable with sheet feeder	359.00
520	289.00
560C-Color Ink Jet	569.00
1200C-2MB RAM, 6 PPM, Color	1399.00
1200P-Postscript version	2099.00

LaserJet

4L	659.00
4+ 600dpi, 12ppm, 2MB	1449.00
4M	1899.00
4M+	1999.00
4SI 17ppm	2955.00

(415) 813-0600
(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, 94036



8th year ANNIVERSARY Special

ACCESS

ACCESS COMPUTER TECHNOLOGIES

- Price good thru 9/18/94
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

8th year ANNIVERSARY Special

ACCESS

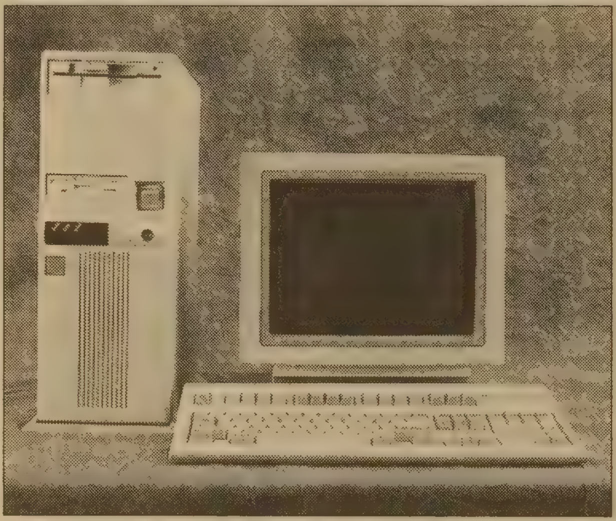
COMPUTER TECHNOLOGIES

Anniversary Celebration Sale!

MS-OFFICE WINDOWS PROFESSIONAL

$399 SS1200PT

W/ ANY COMPLETE SYSTEM PURCHASE



Green VESA Local Bus

- Green VLB Motherboard
- 4MB RAM expandable to 32MB
- AMD DX2-66MHz processor
- 256K Cache memory
- 3 32-bit VLB expansion slots
- 3.5" 1.44MB floppy drive
- VLB IDE HD/FD controller
- 2 serial, 1 parallel & 1 game port
- Mid Tower w/ power supply
- 101-key enhanced keyboard

$599

***FREE Cleaning Kit!**
w/ any complete system purchase

Hard Drives

CONNER

210MB, 14ms	$179.00
420MB, 13ms	209.00

Maxtor

130MB, 15ms, 7131	149.00
170MB, 13ms, 7171A	159.00
345MB, 14ms, 7345A	199.00

Quantum

270MB, IDE	189.00
540MB, 12ms	329.00

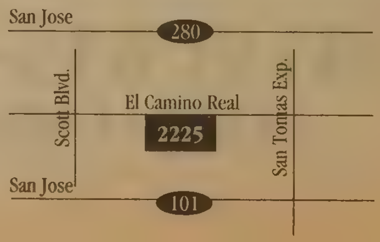
SIMMS-Memory

1MB (1x9) 70 ns, 3-chip, ICS107	$36.99
4MB (4x9) 70 ns, 3-chip, ICS407	135.00
1MB (1x9) 70 ns, 9-chip, ICS1079	39.00
4MB (4x9) 70 ns, 9-chip, ICS4079	149.00
4MB (1x32) 72 pin, ICS0432	135.00
4MB (1x36) 72 pin, ICS0472	155.00
8MB (2x32) 72 pin, ICS0832	275.00
8MB (2x36) 72 pin, ICS0872	309.00
16MB (4x32) 72 pin, ICS1632	559.00
16MB (4x36) 72 pin, ICS1672	579.00

Call for CPU Prices!

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050

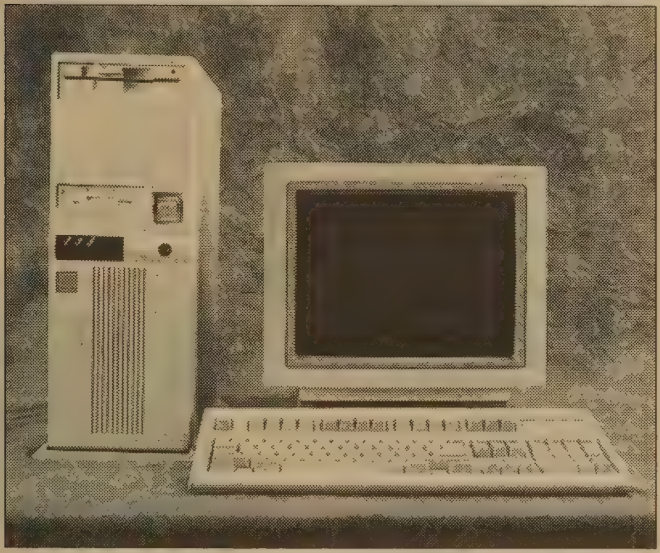


Anniversary Celebration Sale!

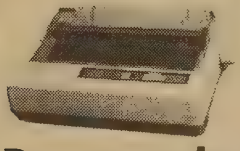
MS-OFFICE WINDOWS PROFESSIONAL

$399 SS1200PT

W/ ANY COMPLETE SYSTEM PURCHASE

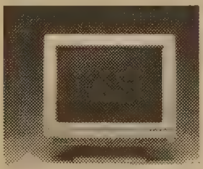


8th year ANNIVERSARY Special



Panasonic KX-P2023
Quiet Printer
***remanufactured**
$149

8th year ANNIVERSARY Special



Abonite 14" VGA
Monitor
$149

8th year ANNIVERSARY Special

Philips CD-ROM Drive
Complete Kit, I/F, Driver, Cable
$49

486 DX-33 VLB

- 486VLB Motherboard
- 0MB RAM expandable to 32MB
- AMD DX-33 processor
- 256K Cache memeory
- 3 32-bit VLB expansion slots
- 3.5" 1.44MB floppy drive
- VLB IDE HD/FD Controller
- 2 serial, 1 parallel & 1 game port
- Mid-Tower with power supply
- 101-key enhanced keyboard

$399

*FREE Cleaning Kit!
w/ any complete system purchase

Motherboards

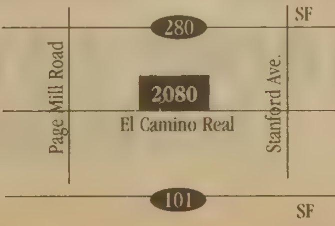
386-33, 64K Cache, AMA333	$59.00
386-40, 128K Cache w/ CPU, AMA340C	89.00
486MB	
486DLC-40, 128K w/ CPU, AMA40DLC	129.00
486VLB, 256K Cache, AMA4132	99.00
486 PCI/VLB, 256K Cache, AMA4134	159.00
486DX, 64K Cache, AMA433A	59.00
486DX, 128K Cache, AMA433B	89.00
486VLB, Green, AMA486V	99.00
ALARIS MB	
Leopard SLC2-66VLB	199.00
Leopard Plus 128K, w/ FPU	249.00
Pentium MB	
66MHz, PCI, 512K Cache, AMA566P	399.00
90MHz, VLB, 512K Cache, AMA590V	369.00
90MHz, PCI/VLB, 512K Cache, AMA590P	409.00

8th year ANNIVERSARY Special

ACCESS
COMPUTER TECHNOLOGIES

(415) 813-0600
(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, 94036



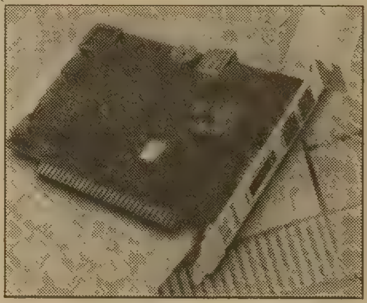
- Price good thru 9/18/94
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

8th year ANNIVERSARY Special

ACCESS COMPUTER TECHNOLOGIES

Anniversary Celebration Sale!

USRobotics®
The Intelligent Choice in Data Communications



Sportster Modems

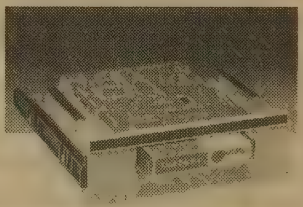
The 14.4 Fax Modems

- Internal PC version
- V.42/MNP5
- Easy installation
- 5 year limited warranty

$109.99

External....139.99

COLORADO MEMORY SYSTEMS INC.



DJ-20 Internal 250MB Tape Backup	**$149.99**
JT-20 External 250MB Tape Backup	**$299.99**
3M DC2120 Tape Cartridge	$10.99

Canon

BJC-600
Color Ink Jet

- 360dpi resolution
- 240cps, 170 HQ
- 6.4 nozzles per colot
- 16.7 million color

$449*

**remanufactured printer*

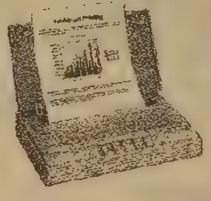
PCMCIA Cards

EPSON

9624 PCE24	69.00
14.4 ADC14	199.00

Megahertz CORPORATION

2496	$89.00
XJack 1144	199.99
XJack 2144	269.00



Canon

BJ-10ex
Portable Inkjet

- Prints up to 84cps
- Weighs only 4 lbs.
- Prints transparencies

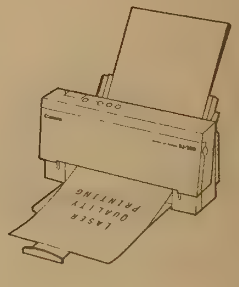
Great for notebooks!

$129*

** Refurbished Printer*

Canon

BJ-200 Inkjet



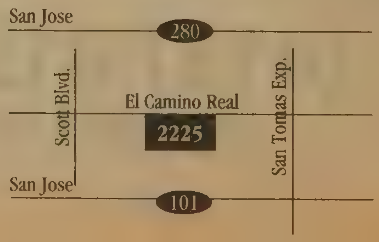
- Prints up to 248cps
- 100-sheet feeder
- Optional ASI
- 90-day Warranty

$179*

** Refurbished Printer*

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050



Anniversary Celebration Sale!

8th year ANNIVERSARY Special

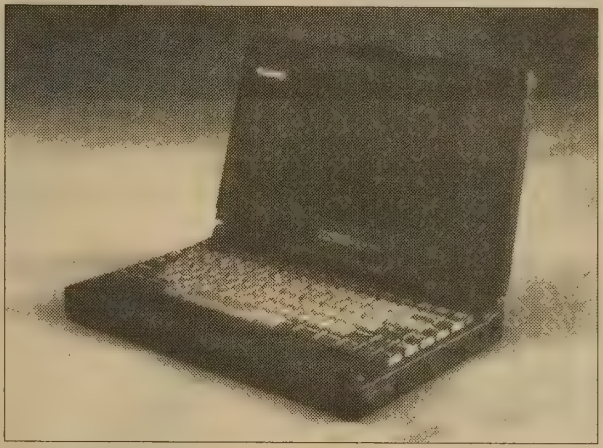
Canon *InnovaBook 10 Sub-Notebook!*

NEW!

- Powerful Intel SL-Enhanced 486SX processor
- Standard 4MB RAM, expandable to 20MB
- Pre-installed MS-DOS 6.21 and Windows 3.11
- External high-density 3.5 floppy drive
- Built-in trackball with full sized keyboard
- 1 year waranty with easy service and support

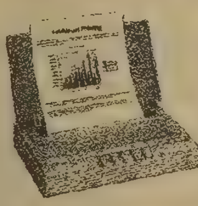
CPU	Hard Drive	Mono	P. Color
SX-33	120MB	$1319	
SX-33	170MB	$1389	$1949
SX-33	260MB	$1479	$2089

Weighs only 4 lbs!



intel inside

Canon $30 Rebate*... on Printers

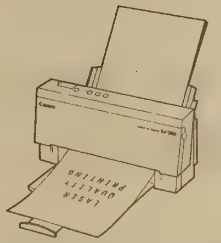


BJ-10sx Portable Bubble Jet Printer

- Prints 30% faster than 10ex
- Weighs 10% lighter than 10ex
- Text graphics up to 360dpi
- Uses plain paper & transparencies
- 2 year warranty

$199*

BJ-200e Ink Jet Printer



- 360dpi resolution
- Prints up to 248cps
- 100-page sheet feeder
- 7 resident fonts
- Hold up to 10 envelopes
- 2 Year Warranty

$249*

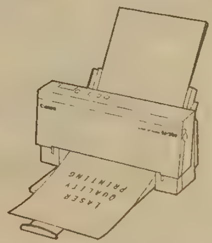
BJ-230 Wide Carriage..$369*

BJC-600 Color Ink Jet Printer

- 360 dpi
- 100-sheet ASF
- 240cps draft, 170cps high quality
- 16.7 million colors available
- 64 nozzles per color
- 2 year warrnaty

$509*

BJ-100 Inkjet Printer



- 140cps, 120cps
- 360x360 resolution
- 64 nozzles print head
- 100 sheet paper tray
- 2 year warranty

$199*

**$30 end-user rebate on selected models, thru 8-31-94*

ACCESS

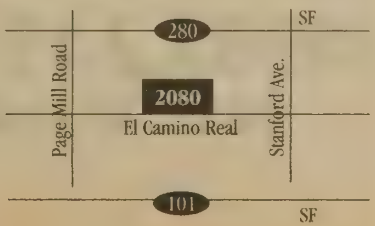
ACCESS COMPUTER TECHNOLOGIES

- Price good thru 9/18/94
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

(415) 813-0600

(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, 94036



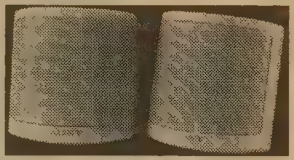
8th year ANNIVERSARY Special

ACCESS COMPUTER TECHNOLOGIES

Anniversary Celebration Sale!

SONY

SRS-PC30 Active Computer Speakers



- Built-in amplifiers
- Bass boost switch
- Monitor mounting kit
- AC power adapter
- 3 watts power output

$66

GDM-15sf 15" Trinitron Display

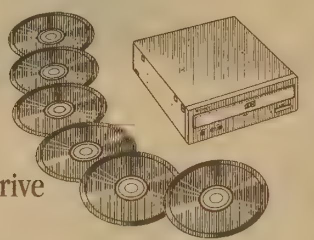
New!

- 14.0" Max viewing area
- .28mm dot pitch
- 1280x1024 resolution
- 50-120Hz refresh rate
- 3 year warranty

EPA POLLUTION PREVENTER

$449

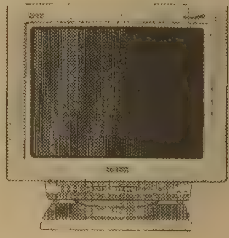
Desktop Library



- Sony Dual speed CD-ROM drive
- 16-bit stereo sound card
- Sony shielded speakers
- 6 popular CD titles
- HDS33E

$299

GDM-17Se 17" Trinitron Display



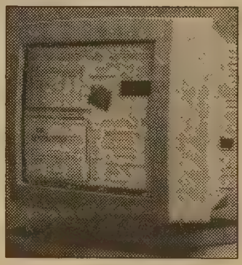
EPA POLLUTION PREVENTER

- 1600x1200 max resolution
- 25mm dot pitch
- 50-150Hz refresh rate
- Energy Star compliant

$949

EPSON®

14" SVGA Monitor



- 14" SVGA monitor
- 1024x768 resolution
- .28mm dot pitch

MTE14 **$219**

Stylus Color

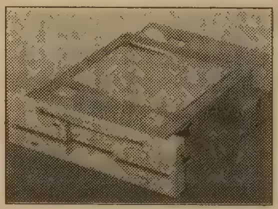
Picture-like output!

- 720x720 max resolution
- 48 nozzles per color
- 240 cps @ 12 cpi
- 5 bitmap, 4 scalable font
- 2 year limited warranty

PTE720 **$599**

Dual Floppy Drive

Limited Drive Bay Solution!



- 5.25" and 3.25" in one
- 42.8mm height
- 500Kbit/sec tranfer rate

$79.99 DFS0305

Stylus 800 Ink Jet Printer

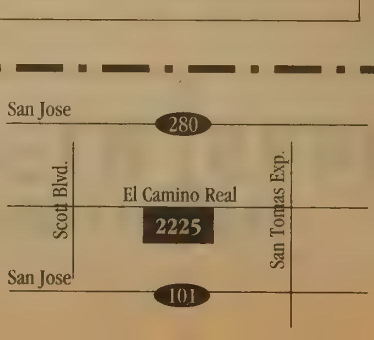
- 150cps printing speed
- 360dpi resolution
- 100 sheet feeder
- 2 year warranty

Lower Price!

PTE800 **$219**

(408) 247-4444
(408) 247-4448 FAX

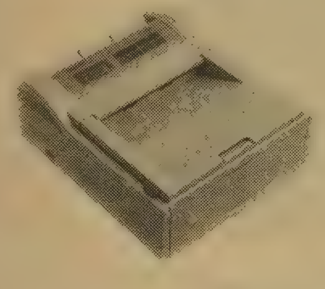
SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050



Anniversary Celebration Sale!

8th year ANNIVERSARY Special

OKIDATA®



OL-400e LED Page Printer

- Compact Size and sleek design fits comfortably on any desktop
- Fast 4ppm printing with RISC microprocessor for higher productivity
- 44 fonts for great-looking correspondence and reports
- Perfectly compatible with virtually all software applications

$479

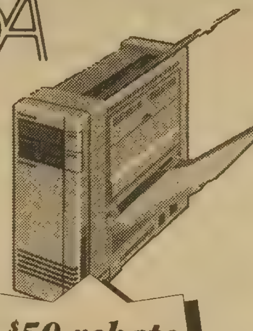
OL410e

- 600 dpi resolution
- 4 ppm

$649

Panasonic

Office Automation OA



KX-P4400 SideWriter Laser

- 4ppm
- 512K memory
- 300dpi resolution
- 100-sheet multi-purpose tray
- HP IIP emulation
- 1 year warranty

*$50 rebate and Free Toner**

$399*

KX-P2023	$199.00
KX-P2123	239.00
KX-P4410 Laser	429.00

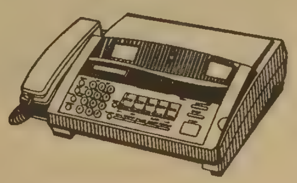
** enduser rebate thru 9/30/94*

brother

We're at your side.

No-Curl!

950M Plain Paper Fax Machine



- 256KB memory
- Auto 30 page feeder
- 160 station memory
- On-screen programming

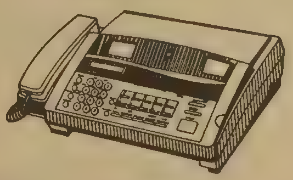
$578

brother

We're at your side.

No-Curl!

780^{MC} Plain Paper Fax Machine



- Receives up to 50 pages in memory
- Auto 15 page feeder
- 16-digit LCD display
- Built-in answering machine

$398

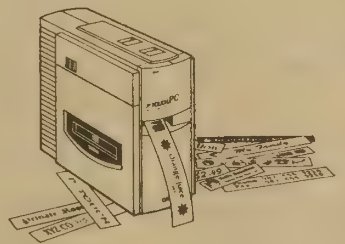
brother

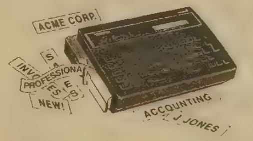
We're at your side.

20% Off accessories

P-Touch Professional Labeling System

- Creates customized adhesive-backed label
- Different size tape from 1/4" to 1"
- Prints English or Spanish
- Battery operated or AC adaptor



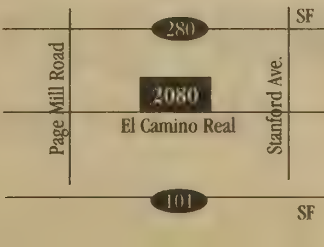

ACME CORP.
ACCOUNTING
NEW!

PT-12	$99.99
XL-30 Prints Bar Code	149.00
XL-35 With Case	199.00
P-Touch PC	249.00

(415) 813-0600

(415) 813-0635 FAX

PALO ALTO
2080 El Camino Real
Palo Alto, 94036



ACCESS

COMPUTER TECHNOLOGIES

- Price good thru 9/18/94
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

Anniversary Celebration Sale!

8th year ANNIVERSARY Special

ACCESS
COMPUTER TECHNOLOGIES

AC Line Conditioner

Eliminates Surges & Spikes...
with clean, steady power level

300VA	$29.00
500VA	$59.00
1000VA	$69.00

COMPUTER CASES

AT Full Size Desktop	CAS214	$29.00
Baby Desktop	CAS200	$49.00
Mini Tower w/ 200W	CAS3201B	$39.99
Medium Tower w/ 230W	CAS8922D	$69.00
Full Tower w/ 230W	CAS320	$89.00
Super Tower w/ 300W	CAS320S	$149.00

NANAO

FlexScan® F550i-W

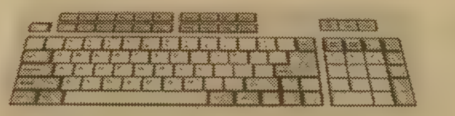
3 Year Warranty!

- 17" monitor
- 1280x1024 resolution
- .28mm dot pitch
- 1024x768 @ 75Hz
- Anti-reflective ErgoCoat

energy EPA POLLUTION PREVENTER

$889

Keyboards



NMB 101 Key w/ PS/2 connector	$15.00
ACER 101-Key w/ PS/2 connector	19.99
MITSUMI 101-key	29.00
KEYTRONIC 101-key	39.00
MAXISWITCH Pro-II 124-key Programmable	69.00
PROXELLENT ProX-121 Programmable	69.00
FOCUS	
8000 101 Key w/ Calculator	49.00
2001 101 Key w/ Calculator	39.00
9000 129 Key w/ Calculator, Programmable	59.00
NORTHGATE *"Top Of The Line"*	
OnmiKey 101-NI/102	89.00
OmniKey Ultra T	109.00
OmniKey Ultra F	109.00

Mitac NEW!

M1564PD
15" SVGA Monitor

- 15", Edge-to-Edge display
- Non-glare flat screen
- Digital control w/ on-screen display
- 0.28 mm dot pitch

$299.99

ATI TECHNOLOGIES INC.

Graphic Pro Turbo
2MB VLB

ADN102V **$359**

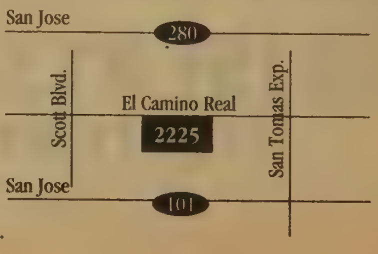
Genoa SYSTEMS CORPORATION

8500VL
1MB VLB

ADN8500 **$99**

(408) 247-4444
(408) 247-4448 FAX

SANTA CLARA
2225 El Camino Real
Santa Clara, CA 95050



Anniversary Celebration Sale!

8th year ANNIVERSARY Special

NEC

Triple Speed CD ROM Drives

3xi, internal	$388
3xe, external	$469
3xp, portable	$389

MultiSpin 4x Pro

Quad-Speed CD ROM Drive

Fastest in the Market!

- 180ms access time
- 600 kbytes/sec data transfer rate
- 256 kbytes memory buffer
- 44.1 KHz Frequency for Audio
- 2 year limited warranty

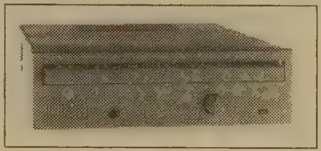
$849

PHILIPS

Internal CD-ROM Drive
with Driver, interface and Cable

HDP205 **$49**

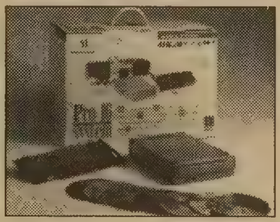
MITSUMI



Internal Double Speed CD ROM Drives
w/ interface, 250ms Access Time

HDM001 **$129**

MEDIA VISION



Pro 16
Multimedia System

SCSI!

- NEC 2xp CD ROM Drive
- ProAudio Spectrum 16
- Microphone, SCSI IF
- 8 popular CD titles

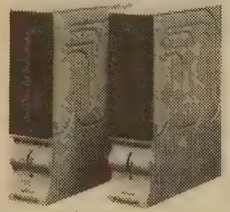
ADS212 **$399**

CD Titles

Microsoft Encarta	$89.00
The Family Doctor	25.00
Jones In The Fast Lane	21.00
Mixed Up Mother Goose	18.00
Toolworks Encyclopedia	29.00

Speakers

Panasonic EAB710P

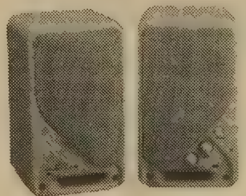


- 14 watts power output
- Acoustic-maze design
- Compact design

$159.99

EAB401P **$59.99**

Labtec
SS-700 Amplified Speakers



- Built-in equalizer
- Individual volume control
- 4 watts power output

$29.99

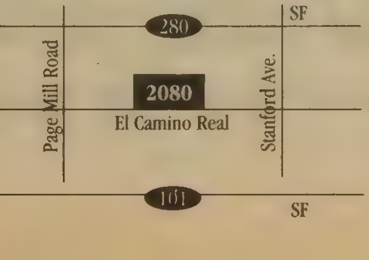
ASL-800 .... **$33.99**

ACCESS
ACCESS COMPUTER TECHNOLOGIES

- Price good thru 9/18/94
- Not responsible for typos
- Price subject to change without notice
- Sale prices are for end users purchase only

(415) 813-0600
(415) 813-0635 FAX

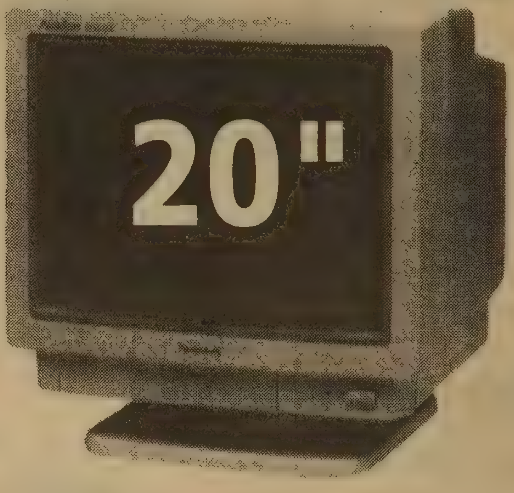
PALO ALTO
2080 El Camino Real
Palo Alto, 94036



The perfect monitor for CAD, graphic and desktop publishing applications.

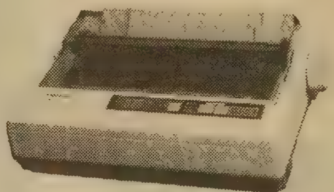
Features:

Simple to use, very flexible and reliable
Front controls for easy access
Fully compatible for PC and Mac
Maximum resolution of 1280x1024
Large 19" diagonal viewing area
50-90Hz vertical scan rate
Non-glare black matrix screen
0.31mm dot pitch



PanaSync C1991 20" $999*

**Remanufactured monitor w/ full factory warranty*

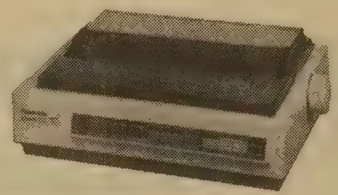


KX-P2023

- 24-pin Quiet printer
- Fast 240cps printing speed
- 7 built-in fonts

FREE RIBBON!
KX-P145

$149*



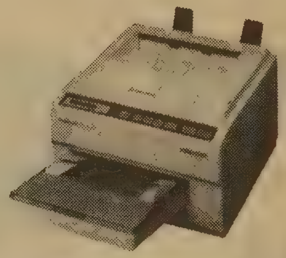
KX-P2123

Option: Color-Abe!

- 24-pin Quiet printer
- Fast 240cps, 80 cps LQ
- 6 built in fonts

FREE RIBBON!
KX-P150

$169*



KX-P4410

- 5 pages per minute
- HP IIP emulation
- 512K expandable to 4.5MB
- 200 sheet multipurpose tray

$389*

**Remanufactured printers w/ factory warranty*

Call for more information

1-800-359-6800
or (408) 247-4444
ACCESS Computer Technologies

Panasonic
Office Automation OA

Always stay a step ahead.

Step™ Note

Modular Notebooks

energy
EPA POLLUTION PREVENTER

MICROSOFT® WINDOWS NT™
NT

AT&T
Global Information Solutions

EXPANDABILITY

- 4MB RAM expandable to 20MB
- 486SX/DX processor
- Removeable screen, hard drive, floppy drive and battery
- Modules for hard drive, floppy, Battery pack, Scanner, Ethernet LAN, SCSI CD-ROM drive

GRAPHIC ABILITY

- Accelerated 32-bit VESA local Bus VGA WD90C24 VGA with 1MB memory

CPU	Hard Drive	Mono	Dual Scan	Active
DX2-50	250MB	$1935	$2435	$3295
DX2-50	340MB	$2135	$2635	$3495
DX4-75	250MB		$2635	$3495
DX4-75	340MB		$2835	$3695
DX4-75	514MB		$3135	$3995

MULTIMEDIA

- Built-in speaker with keyboard volume control
- Built-in microphone with multi-directional receiver
- Earphone jack

OTHER FEATURES

- Built-in removeable trackball
- 2 PCMCIA Type II slot
- Fast battery charge-1.5 hours
- MS-DOS and Windows preinstalled
- Carrying case included

intel inside™

Call for more information

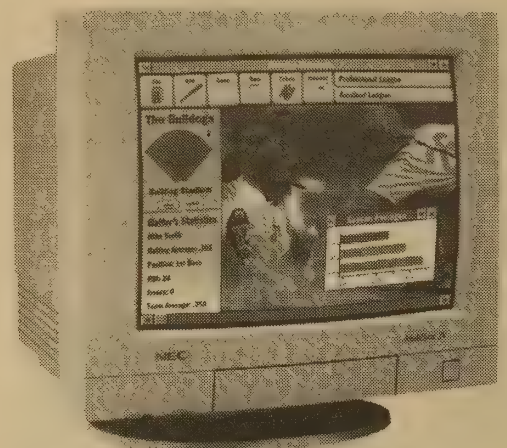
1-800-359-6800

or (408) 247-4444

ACCESS Computer Technologies

EVEREX
EVER for EXcellence®

NEC MultiSync® Monitors



BACK to SCHOOL SPECIAL

energy EPA POLLUTION PREVENTER

REDUCED MAGNETIC FIELD RMF

THREE YEAR LIMITED WARRANTY 3

Energy Star Compliant
- NEC's IPM™ system for energy conservation
- VESA DPMS compliant

MultiSync Quality and Reliability
- 3 year limited warranty
- Toll-Free technical support number

Enhanced Comfort and Ease Of Use
- ErgoDesign™ for comfort
- Upfront digital control buttons
- Anti-static screen
- REF™: Reduced Magnetic Field

MultiSync® 2V

Superior display performance
- 14" non-glare conventional CRT
- 13.0" diagonal viewable area
- .28mm trio dot pitch

Multiple Frequency Technology
- 1024x768 non-interlaced
- 832 x 624 Mac resolution
- 70Hz vertical refresh rate

$299*

**Price after $25 instant rebate*

MultiSync® 3V

Larger, More accurate images
- 15" non-glare conventional CRT
- 13.8" diagonal viewable area
- .28mm trio dot pitch

Multiple Frequency Technology
- 1024x768 non-interlaced
- 832 x 624 Mac resolution
- 60Hz verticalrefresh rate

$399*

**Price after $40 instant rebate*

Call for more information

1-800-359-6800
or (408) 247-4444
ACCESS Computer Technologies

NEC

NEC Versa® Notebook

FREE Battery*... $99 Value!

FREE Battery*... $99 Value!

Versa® S *Sub-Notebook*

- SL-Enhanced i486™ with 8KB Cache
- 4MB of RAM expandable to 8 or 12MB
- Weighs less than 5 lbs.
- Two Type II or One Type III PCMCIA slots
- Factory-installed Software:
  MS-DOS® and Windows™
  On-Line User's Guide, PCMCIA Guide
- Advanced pointing device:
  SurePoint™ integrated mouse
- 3 Years Standard Return-To-Factory Warranty
  1 Free Year of UltraCare with Registration
  Toll-Free, 24-hour Service Hot Line
  Door-to-Door Courier Pickup and Return

CPU	Hard Drive	P. Color	A. Color
SX-33	210MB	$2499	$3399
DX-50	260MB		$3899

**Free Battery with any Versa S purchase, thru 8/31/94*

Versa® V *Notebook*

- SL-Enhanced i486™ DX2-50 with 8KB Cache
- 4MB of RAM expandable to 20MB
- Weighs less than 7 lbs.
- Two Type II or One Type III PCMCIA slots
- Factory-installed Software:
  MS-DOS® and Windows™
  On-Line User's Guide, PCMCIA Guide
- Front mounted VersaTrack™ trackball
- 3 Years Standard Return-To-Factory Warranty
  1 Free Year of UltraCare with Registration
  Toll-Free, 24-hour Service Hot Line
  Door-to-Door Courier Pickup and Return

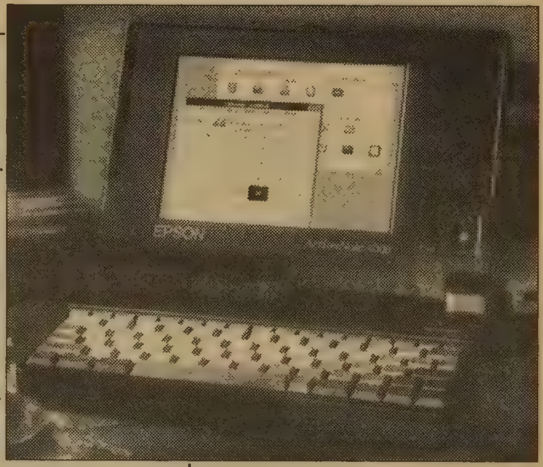
Hard Drive	P. Color	A. Color
250MB	$2999	$3829
340MB		$4029
540MB		$4529

Call for more information

1-800-359-6800
or (408) 247-4444
ACCESS Computer Technologies

NEC

Good Things Come in Small Packages...



POWERFUL PERFORMANCE

- Fast: 486SLC/33MHz microprocessor
- 4MB of RAM, expandable to 8MB
- Removable 170MB hard drive
- External 3.5" floppy drive

HIGH-END FEATURES

- Type II PCMCIA slots for PC cards
- Built-in 2-button trackball
- Attractive carrying case
- MS-DOS and Windows pre-installed

LIGHTWEIGHT

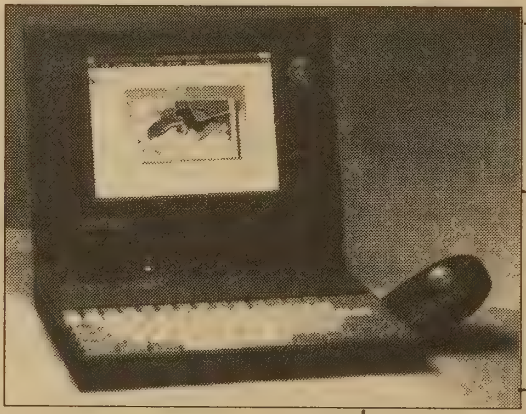
- 3.85 lbs. including battery & hard drive
- Small: 1.5" x 10" x 7.6"

EPSON EXTRA CARE

- 1 year limited warranty with Epson's exclusive Extra Care Road Service
- Toll-free technical support hotline

ActionNote™ 4000 *Sub-Notebook* $1095

Smart design. Full Color. A smart value.



COMPLETE SYSTEM

- Handsome carrying case
- NiCad battery pack
- MS-DOS and Windows
- Logitech TrackMan trackball

HIGH-END FEATURES

- 486SLC2-50MHz (clock-doubled)
- 4MB RAM expandable to 8MB
- 120MB IDE hard drive
- Built in 3.25" floppy drive

LIGHTWEIGHT, COLOR

- 5.5 lbs. with battery pack installed
- Enhanced passive matrix color LCD, supports up to 256 colors

EPSON EXTRA CARE

- 1 year limited warranty with Epson's exclusive Extra Care Road Service
- Toll-free technical support hotline

ActionNote™ 500C *Color Notebook* $1599

Call for more information

1-800-359-6800
or (408) 247-4444
ACCESS Computer Technologies

EPSON®

Microsoft® Mouse

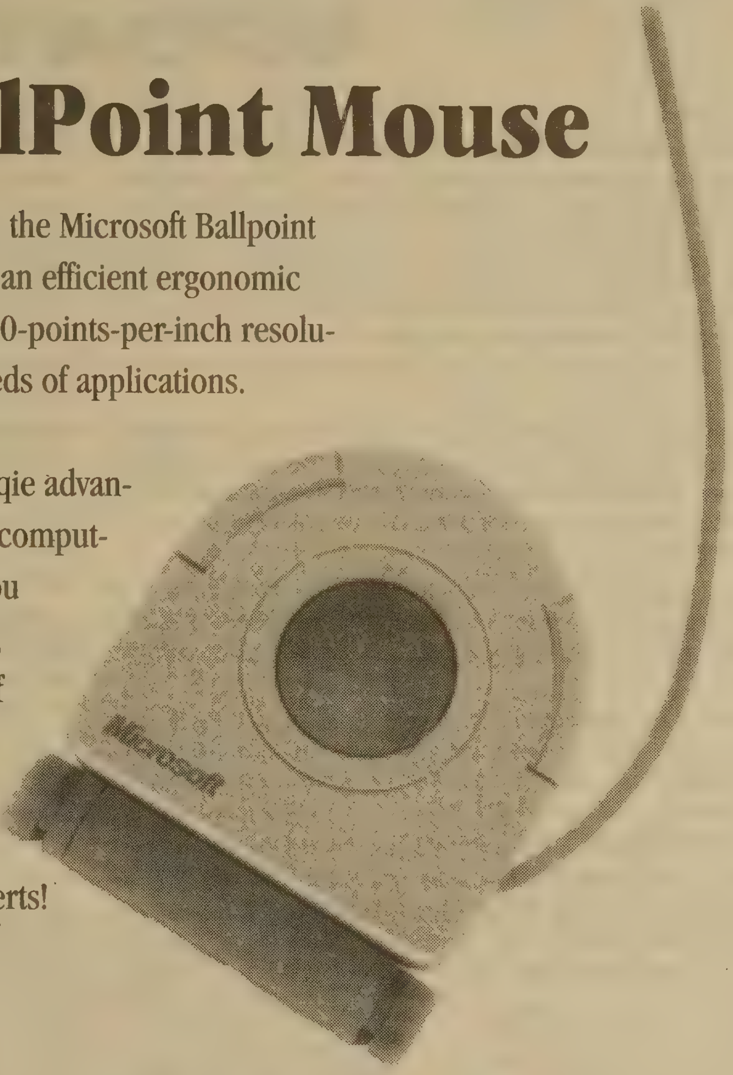
Created for notebook and desktop computers, the Microsoft Ballpoint mouse has a revolutionary design that's ideal whenever space is at a premium. Set it next to your keyboard and get the same high resolution performance as the best-selling Microsoft Mouse.

Microsoft® BallPoint Mouse

Meet an exciting member of the Microsoft family: the Microsoft Ballpoint mouse. Like the popular Microsoft Mouse, it has an efficient ergonomic design, adjustable acceleration and sensitivity, 400-points-per-inch resolution for pinpoint control, and support for hundreds of applications.

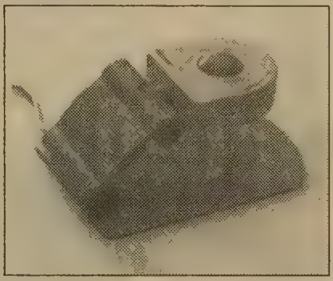
But just one look will tell you this mouse has uniqie advantages. It brings mouse-driven computing to your computer. Set the mouse to the left or right - whatever you prefer. The Ballpoint mouse can also be lowered, swiveled in, out or up to maximize the comfort of your hand.

The Microsoft Ballpoint mouse: It's a sensational innovation from Microsoft, the mouse experts!

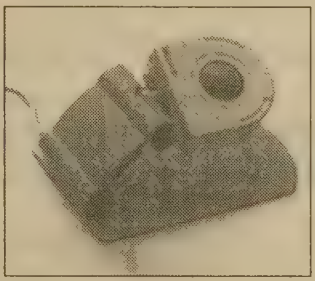


Ready...

Tilt...



Swivel!



Microsoft® BallPoint Mouse **$19.99**

Call for more information

1-800-359-6800
or (408) 247-4444
ACCESS Computer Technologies

Microsoft

Product Spotlight

UPDATES

- **Aladdin Systems** released **StuffIt Expander 3.5**, a major upgrade to its freeware product that gives Mac users an easy way to expand compressed files downloaded from online services. Aladdin Systems, 165 Westridge Dr., Watsonville, CA 95076. (408)761-6200.

- **Autodesk's Multimedia Division** is offering a **special promotion of AutoVision 1.0, including a copy of RenderPrint** from Insight Development Corp. The suggested retail price of $595 for the package will be available until September 30, 1994. Autodesk, Inc., 2320 Marinship Way, Sausalito, CA 94965. 1-800-879-4233.

- **Canon Computer Systems** has launched a three-part program to expand its small office/home office user base. The program includes a **full-line rebate offer, the new BJ-100 Bubble Jet printer, and an upgrade for the BJC-600 color printer.** Canon Computer Systems, Inc., 2995 Redhill Ave., Costa Mesa, CA 92626. (714)438-3000.

- **DataViz** shipped **Conversions Plus for Windows v2.5**, the latest version of its file translation software. Upgrades from earlier versions are $39.95, while the suggested retail price is $149. DataViz, 55 Corporate Dr., Trumbull, CT 06611. (203)268-0030.

- **FastTrax International** has released **FastTrax 5.0**, which is 20% faster and delivers greater Windows, DOS, and OS/2 performance. Upgrades cost $30, competitive upgrades $40, and retail price is $70. FastTrax International, 880 Ensenada Ave., Berkeley, CA 94707. (510)525-3510.

- **Lotus** announced **Lotus Approach Release 3.0**, a new version of its end-user relational database for Windows. It is available for an introductory price of $129 until December 31, 1994, after which the price will be $495. Upgrades from Approach 2.x and SmartSuite 2.1 are available for $79. Lotus Development Corp., 55 Cambridge Pkwy., Cambridge, MA 02142. (617)577-8500.

- **Lucid** released **v3.0** of its **Energize Programming System**. Energize 3.0 is available on Solaris 2.x and SunOS 4.1, and is available free to current Lucid support customers; otherwise it's $4250 for a single unit, or $2950 per unit for ten. Lucid, Inc., 707 Laurel St., Menlo Park, CA 94025. (415)329-8400.

- **MapInfo Corp.** shipped **MapInfo v3.0 for Windows and v3.0 of the MapBasic Development Environment**. MapInfo for Windows is priced at $1295, MapBasic for Windows is $795. Upgrades are $299 for MapInfo and $199 for MapBasic. Version 3.0 for Mac and UNIX will ship in late summer/early fall. MapInfo Corp., One Global View, Troy, NY 12180-8399. (518)285-6000.

- **NB Engineering** shipped **Indeo video Release 3.2**, an upgrade to Intel's enabling software-only playback technology for multimedia developers. The Indeo video driver can be downloaded from Intel's BBS at (503)645-6275 or the Intel forum on CompuServe (Go Intelforum), or can be obtained by calling 1-800-628-8686 option 131. NB Engineering, 2110 Priest Bridge Dr., Suite 1, Crofton, MD 21114. (410)721-5725.

- **OptImage** announced the availability of **Balboa 2.0**, the latest version of its collection of ready-to-use CD-i runtime libraries for C programmers. The upgrade is available for $800; the suggested retail price is $4000. OptImage, 1501 50th St., Suite 100, W. Des Moines, IA 50266. (515)225-7000.

- **Transparent Language, Inc.** released **Windows v2.0 of Transparent Language**, its foreign language learning software. The upgrade costs $34.95. Transparent Language, Inc., 22 Proctor Hill Rd., P.O. Box 575, Hollis, NH 03049. (603)465-2230.

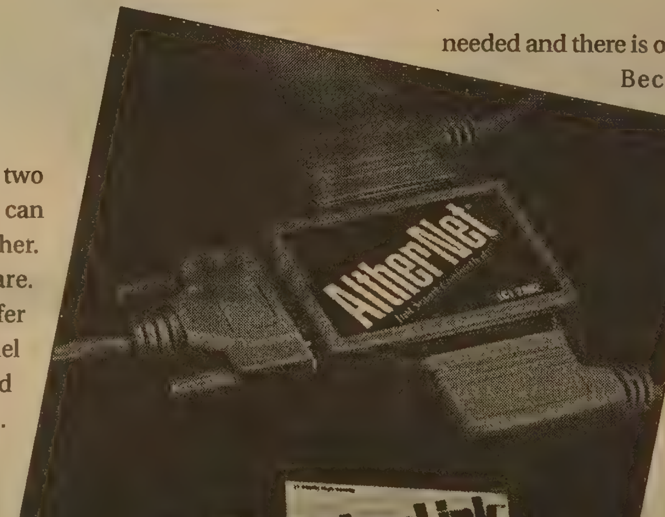
- **Xing Technology** announced **Picture Prowler v2.0**, adding a slide show presentation, the ability to catalog removable media and to add text files, and Photo CD support. Xing Technology Corp., 1540 West Branch St., Arroyo Grande, CA 93420. (805)473-0145.

New Products

LAN Hardware

L.C.I. AltherNet

L.C.I.'s AltherNet device allows networking and printer sharing between two PCs or laptops via their parallel ports. All applications on one computer can be run on the other, as can one computer's hard disk be accessed by the other. With AltherNet, two PCs can share a printer under DOS without software. AltherNet's processor consumes only 4 microamps; and if there is no transfer over the network, there is no power consumption. Because it uses a parallel transfer protocol, data transfer is substantially faster (up to 3MB/min. hard disk transfer rate) and more reliable than common serial transfer methods. It can be installed like an Ethernet card under Windows for Workgroups 3.11 without opening the PC. ($69) Leunig Communications Inc., 1630 Oakland Rd., A115, San Jose, CA 95131. (408)441-6560.



Silicom LAN Pocket Adapters

Silicom's LAN Pocket Adapters make easy connections between Token Ring or Ethernet LANs and notebook and desktop PCs. No power adapter is needed and there is one single unit for all cable. Because of their modular design, the network cable connection section may be removed and swapped with a different cable type. Each adapter comes with drivers for ODI Netware, NDIS, and IBM LAN; is fully software configurable; and supports the new E.P.P. printer ports. ($180) Available in 1994 Jensen Tools catalog, Jensen Tools, Inc., 7815 S. 46th St., Phoenix, AZ 85044. 1-800-426-1194.

NEW GENERATION OF AMERICAN NETWORK SOLUTIONS

ISC Computers & Communications, Inc.
Network Products for Servers & Workstations

3Com® · Microsoft® SOLUTION PROVIDER · Acer · proteon InterNet RESELLER PROGRAM · TELEBIT® · DigiBoard Connectivity Solutions from Digi International

SynOptics Communicatios, Inc. · WordPerfect CORPORATION · Maynard® An ARCHIVE Company · intel® · CorelSCSI · Lotus BUSINESS PARTNER

HEWLETT PACKARD

DEC AXP 150MHZ 16/245/2.88 NT PRE-LOAD	$4599
DEC AXP 150MHZ 32/2GB/2.88NT PRE-LOAD	$7999
HP 9000 Business Workstations - Series 700	
HP LaserJet 4si MX for Multiple Platform Networks.	
HP PaintJet XL300PS RISC based Postcript	$3155
HP NetServer 4d/66 LM w/16Mb, 1Gb	$5499
HP NetServer 5/60 LM w/ 32Mb	$6459

SunSoft
A Sun Microsystems Inc. Business

- Multiuser, multitasking, open-system. Industry standards.
- Support MS-DOS Compatible applications.
- SunSoft Interactive Unix SVR3.2.4 Single/Multi . $325/595
- Solaris 2 X86 1-2 user/Workgroup Server $539/1398
- SunSoft ProWorks C, C++, FORTRAN .... Call
- WABI (Windows Solaris) .... Call
- Best PC Interactive SunPC .... Call

Santa Cruz Operations
SCO AUTHORIZED DISTRIBUTOR

- SCO OPEN SERVER Supports Netware, DOS, Windows
- NEW! SCO OPEN SEVER NWK 16K (CD-ROM) 16 User $1349
- Support TCP/IP, NFS, IPX/SPX.
- SCO Unix/Open Desktop/Open Server
- NEW! SCO OPEN SERVER (CD-ROM)16-user $1695
- SCO ODT CD-ROM/ Lite (dsk3) $889/558
- SCO TCP/IP RTS 2 user/unlimited/MPX $285/475/1195

COMPUTER® ASSOCIATES
Software superior by design.

- Call us to computerize your accounting, marketing and connect system with CA office automation products.
- Computer Associate-Accpac Plus Accounting
- Authorized Consultant and Qualified Installer available.
- Fully client-server setup or stand alone sytems.
- Thousands of vertical market add-in products.
- Supports Novell, Lantastic, OS/2 and more...

Tech Support Hotline:
(800) 998-4394

Tel: (408) 227 2286 • Fax (408) 227 3086
Corporate/School PO and RFP welcome

Apple Update
Authorized Reseller

POWER PC MONTHLY SPECIAL

Powerbook 540 4/240MB / 540C 4/320MB	$2885/4449
Powerbook DUO 280 4/240MB	$2449
Powerbook DUO 280C 4/320 & DUO Dock	$3895
Mac Quadra 605 4/160MB w/ Software	$965
Power Mac 7100/66 250 HDD 8MB/16MB	$2645/3159
Power Mac 8100/80AV 16/500 MB	$5129
Power Apple Workgroup Server 6150/60 8/500MB w/ CD & Appleshare	$4179

Shiva

- Call us for a single solution for Dial-in Dial-out, Remote Routing, and LAN to LAN for PC, Mac, and Unix Systems.
- For ISDN and switchable 56. Available.
- Integrated management of servers and modems from Windows based Shiva Net Manager, SNMP Management System or Telnet.
- Runs concurrently with Windows for Workgroup 3.11, Windows NT, Netware, Lanserver, Lan Manager, Apple Remote Access and all TCP/IP Package.

Servers... Workstation

NEW
NETMANAGE
CHAMELEON V4.0
100% DLL
TCPIC for Windows
only $275.00
•Limited Quantity

Multi-Platform Services

- Best price on Networking peripherals & system
- Network system design/training
- Modem/Phone/On-Site support
- Data/Voice/Fax Networks
- Hundreds of network applications available
- Scheduled maintenance
- Multi-platform connectivities.

ISC Computers & Communications, Inc.

23 Great Oaks Blvd., Suite E, San Jose CA 95119
Free initial consultation

NOVELL®

- Netware V3.12(5/10/25/50) $599/1229/2019/2729
- Netware V3.12(100/250) $3829/6825
- NEW! Netware V4.02(5/10/25/50) $799/1749/2565/3435
- NEW! Netware V4.02(100/250) $4799/8569
- Multi Protocol Router/Plus (IPX, IP, Apple Talk,OSI) $721/999
- We are SFT III specialists, call us to set up Your ZERO-downtime mission critical servers.
- Novell DOS 7.0 .... $78
- Call us for 30% off on Novell Upgrade.
- The Easiest Netware/Unix Integration ever
- UnixWare SVR 4.2P. E(CD-ROM) $189
- UnixWare Applications Server $925
- UnixWare Development kit & Utilities $89
- UnixWare MOTIF Dev. kit $315
- LAN Workgroup (5/10/20) $1119/1569/3285
- NFS Gateway (5/10/50 user) $995/1695/3285

Lotus.
Lotus BUSINESS PARTNER

- Lotus Notes Starter Kit $829
  Available for Netware, OS/2, Windows, NT, SCO, Solaris, and HP-UX
- Lotus Notes Server (Netware, SCO UNIX) .... Call
  Ask our Lotus Certified Specialist to integrate your Lotus Notes Server w/ Shiva Remote LAN-WAN products
- Note Server Platform- Advanced Server for workgroups
  ACADEMIC Institutions please call for best version Lotus software pricing.

Microsoft Update

It is best to integrate w/Novell Netware, and the ultimate client for Windows NT & NT Advanced Server...

- Increase your Windows performance(Win. for Workgrp 3.11 A)
- Windows for Workgroup $158
- SQL Server for NT(Workgrp. 10 Node) $1998
- SQL Server for Windows NT V4.2 .... $699

COMPAQ

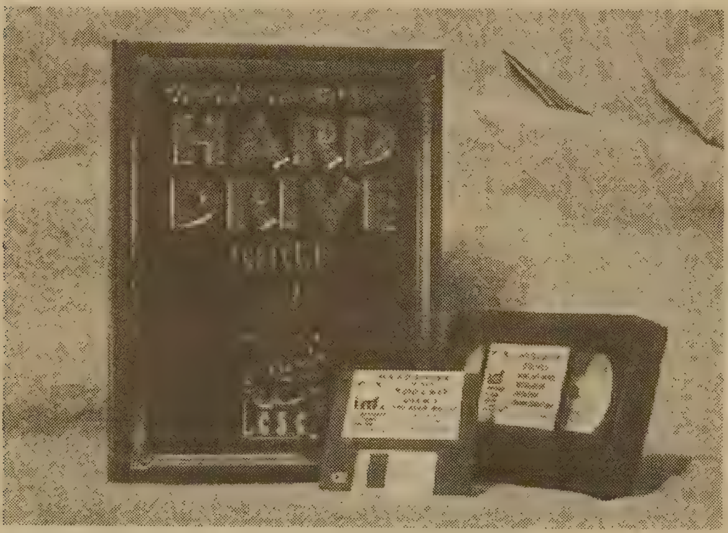
PROLINEA 4/33S 4/1.44 SVGA MEC NIC	$1288
CONCERTO 4/23SL 4/120, PEN NOTE	$2359
CONTURA AERO 4/33C 4/170 CLR NOTE	$2222
PROLIANT 1000 P60 16MB/2GB CD, EISA, NETFLEX2 SVGA	$6599
PROLIANT 1000 P60 32MB/1GB CD, EISA, NETFLEX2 SVGA	$7859
PAGEMARQ 15 LASER, SER, 4MB POST	$1964

COMPAQ Server Special
Call us to find out how we can integrate your system.

Book

Hard Drive Bible, Seventh Edition

Corporate Systems Center has released the seventh edition of the *Hard Drive Bible.* Written for technicians and system integrators who install or work on data storage products, the new edition includes installation instructions, drive parameter tables, and setup information on hundreds of hard, optical, and tape drives. The information is arranged by manufacturer in easy-to-follow tables. Sections covering installation, formatting, and troubleshooting have been expanded. Jumper settings and compatibility information on controller cards and driver software have all been updated and revised. *The Hard Drive Bible* comes with a free video tape with information on how drives work and installation and troubleshooting tips. A copy of Corporate Systems Center's drive performance test software, low-level format programs, and a copy of Seagate's technical support software are also included. ($49.95) Corporate Systems Center, 1294 Hammerwood Ave., Sunnyvale, CA 94089. (408)734-DISK.



Mac Software

HSC KPT Bryce 1.0

KPT Bryce is a standalone Macintosh application that designs and renders stunning natural and supernatural landscapes. Users can choose from dozens of preset skies, grounds, and terrains or create their own landscapes from the ground up. Powerful controls are included, such as surface contour definition, bumpiness, translucency, reflectivity, color, humidity, cloud attributes, alpha channels, and more. KPT Bryce will also transform text or logos into landscapes or objects that inhabit a 3-D world, create distance masks, and generate stereograms. It comes with a 360-degree panoramic, plug-in screen saver module; a slide show utility; and a CD-ROM with hundreds of preset, fully rendered images. ($199, registered Kai's Power Tools users can purchase it for $79.95) HSC Software, 1661 Lincoln Blvd., Suite 101, Santa Monica, CA 90404. (310)392-8441.

Extensis PageTools

PageTools is an integrated set of ten Additions that make PageMaker 5.0 work faster, easier, and more efficiently. It includes such functions as previewing files and simplifying their printing, setting up customizable menu bars, moving objects and text without losing one's place, easily changing colors of many classes of objects, zooming in on page details without leaving the current page view, setting guides, measuring objects without affecting the layout's anchored rulers, and more. In several PageTools, changes can be transferred to page masters. Available now for the Mac, a Windows version will be available in the fall. ($169) Extensis Corp., 811 S.W. Front Ave., Suite 630, Portland, OR 97204. (503)274-2020.

TrapMaker Addition For Aldus PageMaker 5.0

TrapMaker is an Addition for Aldus PageMaker 5.0 that provides users with an integrated means for automatically creating traps for text and objects drawn in PageMaker. It uses a color-based approach to trapping rather than an object-based method; therefore only the part of the object that requires trapping is affected. Text and objects that span multiple backgrounds are trapped to each background, so different parts of an object can be trapped differently. TrapMaker evaluates default color pair relationships based on the characteristics of each color and proposes a default trap type. It can be used on any PageMaker publication prior to printing and allows users to specify print settings for the publication. ($79.95) Aldus Corp., 411 First Ave. South, Seattle, WA 98104-2871. (206)622-5500.

PC Software

Crystalogic Crystal VM

The Crystal VM is a virtual memory management library for C/C++ programmers that offers easy access to expanded, conventional, and virtual disk memory and instant access to all available memory from DOS-based C/C++ programs. The library is a set of routines that allows programs operating in the 16-bit DOS environment to access and use memory of virtually any size. Crystal VM links directly into C/C++ programs; is fully compatible with current memory standards; and is compatible with Microsoft, Borland, and ANSI C/C++ and Microsoft Windows. ($249) Crystalogic Software, P.O. Box 292436, Nashville, TN 37229-2436. 1-800-391-9190.

RISK+

RISK+ is a risk analysis tool that integrates with Microsoft Project 4.0 to quantify the cost and schedule uncertainty associated with project plans. It is composed of two primary components. The first is a Visual C++ dynamic link library implementing the risk analysis engine, graphics output routines, and custom dialog boxes. The second is a project file containing custom Visual Basic for Applications routines and user-interface elements such as a risk analysis

CompuMart

Quality, Service and Value!

Experience it in our Ultra Modern Showroom

COMPLETE PC SYSTEMS, UPGRADE & SERVICES

COMPLETE SYSTEMS

486SX-33/4M/270MB	$ 970
486DX-40/4M/270MB HD	$1,115
486DX2-66/4M/270MB HD	$1,160
P5-60/8M/340MB	$1,975
P5-66/8MB/340MB	$2,070
P5-90/8MB/340MB	$2,190

All systems include SVGA monitor

SYSTEM UPGRADE

Processor, Memory, Harddisk, CD-ROM...

NOTEBOOK PC

COMPAQ, EPSON, NEC, TI, TOSHIBA

CALL FOR THE PRICES!

NETWORK SERVICE

Server and Workstation Install, and Cabling for DOS, Windows, Netware, OS/2, Windows NT, Lantastics, Personal Netware

Network Administration, Backups for Business Applications...plus E-Mail, CD-ROMs, Remote LAN Access, Printing and FAX

DRIVES

Conner	210MB IDE/ 340MB IDE	$175/$225
	420MB IDE/ 540MB IDE	$264/$299
	340MB SCSI/ 540MB SCSI	$305/$359
Maxtor	170MB IDE/ 290MB IDE	$169/$199
	340MB IDE/ 540 MB IDE	$219/$299
Quantum	270MB IDE/ 340MB IDE	$205/$225
	420MB IDE/540MB IDE	$279/$299
	540MB SCSI/ 1GB SCSI	$339/$629
WD	250MB IDE/340MB IDE	$215/$235
	420MB IDE/540MB IDE	$274/$314

MONITORS

ADI	3E	14" .28 NI LR	$ 279
	5EP	17" .28 NI LR	$ 659
KFC		15" .28 1024x768	$ 329
		17" .26 1280x1024	$ 709
MAG	DX15F	15" .28 1028x768	$ 409
	DX17F	17" .26 1280x1024	$ 739
NANAO	F550I	17" .28 1280X1024	$ 885
	F550W	17" .28 1280x1024	$ 949
NEC	3V	15" 1024x768	$ 474
	3FGe	15" 1024x768	$ 569
	4FGe	15" 1024x768	$ 649
	5FGe	17" 1024x768	$ 955
	5FGp	17" 1280x1024	$1129
Viewsonic	6E	14" .28 1024x768	$ 279
	15EX	15" .28 1024x768	$ 389
	15	15" .28 1280x1024	$ 439
	17G	17" .28 1280x1024	$ 795

NETWORK

3COM	509 Etherlink III	$ 95
Artisoft	Lantastic 6.0 Startki 2 Userst	$345
	Lantastic 2000	$175
Intel	Etherexpress 16	$ 99
Novell	Personal Netware	$ 75
	Netware 3.12 5 Users/10 Users	$ 605/$1319
	Netware 3.12 25 Users/50 Users	$1975/$2725
SMC	Elite Plus 16	$ 125
	Elite Ultra 16TP/Coax	$ 97
Cheyenne	ARCserve/FAXserve	Call

SCANNERS

HP	ScanJet IIP/ IICx	$ 499/$ 929
Logitech	Scanman 32	$ 109
	Scanman 256	$ 169
Microtek	Scanmaker IIGS Flatbed Color 600DPI	$ 579
	Scanmaker IISP Flatbed Color 600DPI	$ 795
	Scanner Maker II	$ 599
Tamarack	ARTI Color 600DPI Flatbed	$ 599

MULTIMEDIA

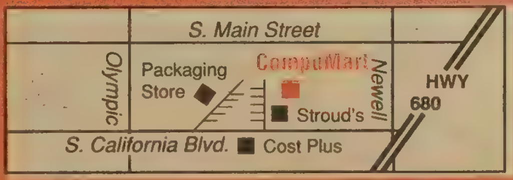
Creative Lab	Sound Blaster Pro Deluxe	$ 89
	Sound Blaster 16	$ 99
	Sound Blaster 16 SCSI	$165
	Sound Blaster 16 SCSI ASP	$199
	Sound Blaster 16 MCD	$139
	Wave Blaster	$179
	ASP Upgrade	$ 55
	Sound Blaster AWE32	$279
	Discovery CD 16	$329
	Edutainment CD 16	$399
	Digital Edge 3Xi	$679
Media Vision	Pro Audio Spectrum 16	$ 85
	Pro Audio Studio	$115
	Pro Movie Studio	$179
Mitsumi	Double Speed CD-ROM	$139
NEC	3Xp Triple Speed Int/Ext CD-ROM	$415
	3Xi Triple Speed CD-ROM	$349
	3Xe Triple Speed CD-ROM	$479
Panasonic	Double Speed CD-ROM	$149
Plextor	Quad Speed CD-ROM	$495
Toshiba	3401B 200MS Int CD-ROM	$275
	3401E 200MS Ext CD-ROM	$419
Turtle Beach	Multisound 16 Sound	$399
	Maui Wavetable Synth	$159
Sony	CDU33A Double Speed	$139

CONTROLLERS

Adaptec	1505/1510A SCSI /CD	$ 59/$ 89
	1522A/1522CK SCSI	$ 79/$145
	1542C/1542CK SCSI	$179/$239
	2842 VL/SCSI	$249
	2940 PCI/SCSI	$289
Buslogic	BT545/ KT545 SCSI	$199/$225
	KT445 VL/SCSI	$265
	BT946C PCI/SCSI	$259
	KT747S EISA/SCSI	$329
Promise	DC200/DC420 IDE CACHE	$105/$109
	DC2040/DC4030VL	$159/$119
Trantor	T338/T348 Parallel/SCSI	$109/$159
Ultrastor	34F VL/ SCSI	$189

TAPE BACK-UP

Colorado	120MB/250MB Int	$ 99/159
	120MB/250MB Ext.	$279/329
HP	35480 DAT 4-8GB SCSI	$ 989
WangDAT	3400DX 4-16GB SCSI	$ 1049



VIDEO BOARDS

ATI	Graphic Ultra Pro VLB 1MB DRAM	$139
	Graphic Ultra Pro VLB 2MB DRAM	$199
	Graphic Ultra Pro VLB/PCI 2MB VRAM	$299
	GRP Turbo 2/4MB	Call
Diamond	Stealth 24 ISA/VLB 1MB	$159
	Stealth 32 VLB/PCI 1MB/2MB	$179/$239
	Stealth 64 2MB/4MB	$319/$479
	Viper 2MB VLB/PCI	$295/$295
Herculus	Dynamite VLB 1MB/2MB	$169/$219
Orchid	Celcius 1MB/2MB	$159/$239
	Kelvin 64 1MB/2MB	$169/$239
Number 9	9Xe64 1MB/2MB	$199/$249

PRINTERS

Cannon	BJ-10SX	$ 249
	BJ-200e	$ 299
	BJC-600	$ 599
HP	310/520	$ 299
	560C/1200C	Call
	LaserJet 4L/4P/4+	Call
Panasonic	Dot Matrix	Call
Okidata	OL400E/ OL410e, 600DPI	$ 519/$ 659
Citizen	Dot Matrix	Call
Fargo	Color Printer	$ 739

SOFTWARE

Corel	Corel Draw & CD for Windows V3	$119
Lotus	1-2-3 for Windows	$299
	1-2-3 4.0 Upgrade	$ 97
Microsoft	Excel V5.0 for Windows	$295
	Excel V5.0 for Windows Upgrade	$119
	Office for Windows V4.2	$465
	Office Upgrade	$265
	Word 6.0 for Windows	$289
	Word 6.0 Upgrade	$125
WordPerfect	WordPerfect 6.0 for Windows	$295
	WordPerfect Upgrade	$99

MODEMS

BOCA	28.8 Fax/Modem Int/Ext	$199/ $235
Intel	14.4 Fax/Modem Int /Ext	$ 99/ $109
	PCMCIA 14.4 Fax Modem	$209
Practical P	14.4 Fax/Modem Int/Ext	$114/ $134
	14.4 Pocket Fax/Modem	$239
US Robotics	14.4 Fax/Modem Int/Ext	$119/ $139
	28.8 Fax/Modem Int/Ext.	$209/ $239
Zoom	14.4 Fax/Modem/Voice Ext	$169/ $189

All prices are subject to change without notice.

(510) 946-1234

1320 S. California Blvd., Walnut Creek (Across from Cost Plus, next to Stroud's)

Monday-Friday: 9:30-8:00, Saturday: 10:00-7:00, Sunday: 12:00-6:00

Over 5,000 Software, Printers, Monitors, CD-ROM, Network Products, Computer Books, Magazines In Stock.

HI-TECH USA

(408) 262-8688 Milpitas
(415) 508-8688 San Carlos

SUPER SALE	MOTHER-BOARD	MOTHER-BOARD WITH CPU	* BASIC SYSTEM	BASIC SYS +120MB HDD + MGP CARD & 14" MONO MONITOR {200MB HDD ADD $30}	BASIC SYS + 120MB HDD + VGA CARD & VGA MONO MONITOR {200MB HDD ADD $30}	BASIC SYS +120MB HDD + SVGA CARD & SVGA COLOR MONITOR {200MB HDD ADD $30}	BASIC SYS +250MB HDD + SVGA CARD & SVGA COLOR MONITOR {420MB HDD ADD $40}	BASIC SYS W/4MB RAM +120MB HDD +SVGA CARD & MONITOR {200MB HDD ADD $30}	BASIC SYS W/4MB RAM +250MB HDD +SVGA CARD & MONITOR {340MB HDD ADD $20}	BASIC SYS W/4MB RAM +420MB HDD +SVGA CARD & MONITOR {540MB HDD ADD $70}
PENTIUM -90/256C VLB PCI USA	$348	$1,038	$Call	$Call	$Call	$Call	$Call	$1,678	$1,728	$1,768
PENTIUM -66/256C VLB PCI USA	288	818	Call	Call	Call	Call	Call	1,458	1,508	1,548
PENTIUM -60/256C VLB PCI USA	288	698	Call	Call	Call	Call	Call	1,338	1,388	1,428
PENTIUM -60/256C VLB USA	218	628	Call	Call	Call	Call	Call	1,268	1,318	1,358
PENTIUM -90/256C VLB PCI	328	1,008	Call	Call	Call	Call	Call	1,648	1,698	1,738
PENTIUM -90/256C VLB	298	978	Call	Call	Call	Call	Call	1,618	1,668	1,708
PENTIUM -66/256C VLB	194	738	Call	Call	Call	Call	Call	1,378	1,428	1,468
PENTIUM -60/256C VLB PCI	258	658	Call	Call	Call	Call	Call	1,298	1,348	1,388
PENTIUM -60/256C VLB	194	618	Call	Call	Call	Call	Call	1,258	1,308	1,348
IBM 486BL-75/256C VLB	N/A	258	418	648	678	778	828	898	948	988
IBM 486SLC2-66/64C VLB	N/A	188	338	578	608	708	758	828	878	918
486DX2-66C VLB	74	278	424	668	698	798	848	918	968	1,008
486DX2-50C VLB	74	218	368	608	638	738	788	858	908	948
486DX-40C VLB	74	198	344	588	618	718	768	838	888	928
486DX-33C VLB	74	194	338	584	614	714	764	834	884	924
486SX-33 VLB	74	154	298	544	574	674	724	794	844	884
486DLC-40/128C VLB	88	144	288	534	564	664	714	784	834	874
486DX2-66/128C NICE EISA VLB	188	438	588	828	858	958	1,008	1,078	1,128	1,168
486DX-33/128C NICE EISA VLB	188	388	538	778	808	908	958	1,028	1,078	1,118
IBM 486SLC2-50C ISA	N/A	148	294	538	568	668	718	788	838	878
486DX2-66C ISA	64	274	418	664	694	794	844	914	964	1,004
486DX2-50C ISA	64	208	364	598	628	728	778	848	898	938
486DX-40C ISA	64	188	338	578	608	708	758	828	878	918
486DX-33C ISA	64	184	334	574	604	704	754	824	874	914
486SX-33C ISA	64	134	278	524	554	654	704	774	824	864
486SX-25C ISA	64	108	258	498	528	628	678	748	798	838
386DX-40/64C	N/A	82	218	472	502	602	652	722	772	812
386SX-40	N/A	56	208	446	476	576	626	696	746	786

*** BASIC SYSTEM CONFIGURATION:** Motherboard & CPU, 1MB memory installed, 1:1 2HD/2FD controller with 2S/1P/1G, 1.44MB Floppy Drive, Internal Clock/Calendar, Enhance Case with Power Supply, and 101-Key Enhanced Keyboard.

BEST MULTIMEDIA SYSTEMS

- 4MB High Speed RAM
- 1.44MB 3.5" Floppy Drive
- ISA/VLB IDE controller w/2S/1P/1G
- 200MB Fast IDE Hard Drive
- ISA / VLB SVGA Card w/1MB
- Enhanced Case w/Power Supply
- 14" SVGA .28 Color Monitor
- Focus 2001 Keyboard
- Double Speed CD-ROM
- Deluxe Speakers
- Sound Blaster Pro Value Edition
- Free CD Deluxe Pak (4 Titles)

BEST BUY

386DX-40/128K ISA	**$988**
486DLC-40/128K VLB	**$1,048**
486SLC2-66/128K VLB	**$1,088**
486SX-25/128K VLB	**$1,048**
486DX-33/128K VLB	**$1,108**
486DX-40/128K VLB	**$1,118**
486DX2-50/128K VLB	**$1,138**
486DX2-66/128K VLB	**$1,208**
Pentium-60/256K VLB	**$1,518**
Pentium-66/256K VLB	**$1,638**
Pentium-90/256K VLB	**$1,878**

UPGRADES

250MB Hard Drive	Add $20
340MB Hard Drive	Add $40
420MB Hard Drive	Add $60
540MB Hard Drive	Add $120
14" Non-Interlaced Monitor	Add $20
15" Non-Interlaced Monitor	Add $90
17" Non-Interlaced Monitor	Add $380

Best Prices in Town!

DELUXE SYSTEMS

386SX-40	$688
386DX-40/64K	708
486SX-25/128K ISA	748
486SX-33/128K ISA	768
IBM 486SLC2-50 ISA	768
486DLC-33/128K VLB	748
486DLC-40/128K VLB	758
486SX-25/128K VLB	758
486SX-33/128K VLB	778
486DX-33/128K ISA / VLB	808 / 818
486DX-40/128K ISA / VLB	818 / 828
486DX2-50/128K ISA / VLB	848 / 858
486DX2-66/128K ISA / VLB	888 / 898
IBM 486SLC2-66/64K VLB	808
IBM 486 BL-75/256K VLB	888
486 DX-33/128K NICE EISA VLB	1,018
486DX2-66/128K NICE EISA VLB	1,058
ORCHID 486DX2-66/256K VLB	1,068
486DX2-66/256K PCI	1,028
Pentium P5-60/256K VLB	1,248
Pentium P5-60/256K VLB - PCI	1,298
Pentium P5-66/256K VLB	1,368
Pentium P5-66/256K VLB - PCi	1,418
Pentium P5-90/256K VLB	1,608
Pentium P5-90/256K VLB - PCI	1,648
Pentium P5-60/256K VLB - PCI USA	1,328
Pentium P5-66/256K VLB - PCI USA	1,438
Pentium P5-90/256K VLB - PCI USA	1,668

SYSTEM CONFIGURATION

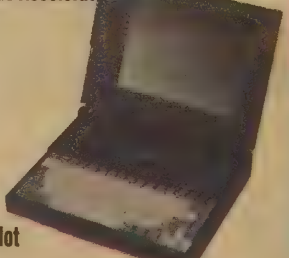
- Motherboard w/CPU
- 4MB RAM 70NS
- 120MB Fast Hard Drive
- 1.44MB 3.5" Floppy Drive
- IDE 2HD/2FD Controller w/2S/1P/1G
- 512KB SVGA Card
- 14" SVGA .28 Color Monitor
- 101-Key Enhanced Keyboard
- Enhanced Case w/Power Supply
- Microsoft Compatible Mouse w/Pad

BEST BUY

UPGRADES

200MB Hard Drive	Add $30
250MB Hard Drive	Add $50
340MB Hard Drive	Add $70
420MB Hard Drive	Add $90
540MB Hard Drive	Add $150
14" Non-Interlaced Monitor	Add $20
15" Non-Interlaced Monitor	Add $90
VLB IDE Controller	Add $10
16BIT SVGA Card w/1MB	Add $20
Window Accelerator w/1MB	Add $20
Cirrus Logic/ Trident VLB w/1MB	Add $30
Diamond S.S. Pro VLB w/1MB	Add $60
ATI Ultra Pro PCI/VLB w/2MB	Add $190
250MB Tape Back-up	Add $130
16BIT Ethernet Card	Add $30
Deluxe Speakers	Add $6
Single Speed CD-ROM w/Card	Add $70
Double Speed CD-ROM w/Card	Add $130
Sound Blaster Pro Value Edition	Add $80
CD Deluxe Pak (4 Titles)	Add $14

MULTIMEDIA VLB NOTEBOOKS



- **32-BIT VL BUS Windows Accelerat**
- **1 MB Video Memory**
- **4MB RAM**
- **120MB Hard Drive**
- **Built-In Trackball**
- **Carrying Case**
- **Built-in Sound Card and Speaker**
- **NICD Battery**
- **One Type III or Two Type II PCMCIA Slot**

BEST BUY

Super Sales	VGA Mono	Dual Scan Color	Active Matrix Color
486SX-25	$1,338	$1,848	$2,828
486SX-33	1,358	1,868	2,848
486DX-33	1,498	2,008	2,988
486DX2-50	1,518	2,028	3,008
486DX2-66	1,538	2,048	3,028

UPGRADES

Microsoft DOS 6.21	Add $40
RAM 8MB / 16MB	Add 240 / 700
Hard Drive 250MB/340MB	Add 110 / 180
NiCD Battery Pak	Add 90
NiMH Battery Pak	Add 150
PCMCIA Fax Modem (96/48/24)	Add 120
PCMCIA Fax Modem (144/144)	Add 200
Docking Station	Add 420

SUPER GREEN PENTIUM VLB-PCI

- **First and Only Green Pentium System**
- INTEL Pentium Processor
- **Made in USA Motherboard**
- **Power Saving Green PC**
- **AMI Flash BIOS**
- **64-Bit Data Bus Memory System**
- **6 Buffer Enhanced Bus Master VLB-PCI**
- **AMP Socket 4 ZIF Socket**
- 8MB High Speed RAM
- TEAC 1.44MB 3.5" Floppy Drive
- VLB IDE controller w/2S/1P/1G
- VLB SVGA Card w/1MB
- 200MB Fast IDE Hard Drive
- Focus 2001 Keyboard
- 14" Non-Interlaced SVGA Monitor
- Medium Tower Case w/Power Supply

BEST BUY

Pentium P5-60/256K	**$1,648**
Pentium P5-66/256K	**$1,758**
Pentium P5-90/256K	**$1,898**

UPGRADES

340MB Hard Drive	Add $40
420MB Hard Drive	Add $60
540MB Hard Drive	Add $120
ATI Ultra Pro PCI /VLB w/2MB	Add $160
15" Non-Interlaced SVGA Monitor	Add $80
Viewsonic 15EX Monitor (Green)	Add $140
Viewsonic 17E Monitor (Green)	Add $500

Why do smart customers keep buying from HI-TECH USA? Simply because we deliver the best values.

HI-TECH USA — BEST PRICES, QUALITY & SERVICE IN TOWN

CASE WITH POWER SUPPLY

Mini Tower Case w/200W Power Supply	**$34**
Desktop AT Case w/200W Power Supply	42
Medium Tower Case w/230W Power Supply	62
Full Tower Case w/250W Power Supply	76
UPS 400VA / 600VA / 900VA	164 / 250 / 360

CD-ROM / MULTIMEDIA

Creative Labs	
Sound Blaster Value Edition	$52
Sound Blaster Pro Value Edition	**72**
Sound Blaster Pro 16 Basic	92
Sound Blaster Pro 16 MCD	**102**
Discovery CD 16 Upgrade Kit	292
Edutainment CD 16 Upgrade Kit	376
Diamond Sonic (AT / SCSI)	84 / 198
Mediavision Jazz 16 (AT/SCSI)	92 / 102
Mediavision Pro Audio Spectrum 16	**78**
Mediavision Pro Audio Studio 16	128
Orchid Gamewave Sound Card (AT)	106
Orchid Soundwave Sound Card (AT)	158
Chinon CDS535 (Int.) SCSI	**246**
Mitsumi / Panasonic / Sony CD-ROM w/Card	**68**
Mitsumi CD-ROM Dual Speed	**120 (w/Card 124)**
NEC 3X (510) Triple Speed SCSI Int. (OEM)	**298**
Orchid CDS3110 (Double Speed) w/Card	146
Panasonic CD-562 Dual Speed	**130 (w/Card 136)**
SONY CD-ROM Dual Speed	**120 (w/Card 124)**
Toshiba XM-3401B (SCSI) Int / Ext	**246 / 348**
Trantor SCSI Host w/Driver	48
Audio Pak (Sound Card, Speaker, Joystick, Earphone)	50
Altek Lansing Speakers	
ACS50/ACS100.1/ACS300.1	66 / 98 / 228
Deluxe Speakers	6

CD SOFTWARE TITLES

American Business Phone Book-1992	14
Animals v1.0 DOS	12
Arthur's Teacher Trouble	16
Atlas Pak v3.1 World/US	15
Barney Bear Go to School	15
Barney Bear Go to Space	15
Battle Chess DOS	15
Beauty & Beast MPC	12
Bring the World to Your Senses	11
Campton's Interactive Encyclopedia MPC	24
Carmen San Diego DOS	18
CD Deluxe Pak (Chess Master 3000, Mavis Teaches Typing, US Altas, World Atlas)	14
CD Game Pack II DOS	15
Chess Master 4000 MPC	15
Composer Quest MPC	18
Dinosaur / Space Adventure	18
Family Choice/Britannica DOS	15
Family Doctor DOS/MAC	16
Family Education Collections DOS	16
Great Cities-Vol 1 / Vol 2 DOS	16
Guy Spy	24
Hard Days Night (Beatles)	18
Jets & Props MPC	16
Jones in Fast Lane MPC	14
Jurassic Park (Screen Saver)	15
King's Quest V DOS	11
King's Quest VI DOS	21
Kodak Photo CD Access	11
Language of the World	15
Loom From Lucas Film DOS	12
Macmillan Dictionary For Children	15
Magic Desk	14
Mario is Missing/World Atlas 3.2	15
Mavis Teaches Typing MPC	14
Mayo Clinic Family Health	15
Micropose Collection 4 Games	16
Microsoft Bookshelf MPC	27
Microsoft Bookshelf, Mixed Up Mother Goose King's Quest V, Thunder-Media Sound Library	46
Microsoft Works MPC	27
MIDI Music Shop	15
Mixed-up Mother Goose MPC	12
Monkey Island DOS	12
MPC Audubon's Mammals	14
National Geographic Mammals DOS	16
National Park	16
PC SIG 12th Edition	18
Peter & Wolf MPC	12
Playing with Language (English)	16
Playing with Language (French)	16
Playing with Language (German)	16
Playing with Language (Japanese)	16
Playing with Language (Spanish)	16
Secret Weapons/Luftwf DOS	12
Sleeping Beauty	13
So Much Shareware IV DOS	17
Sound Library MPC	10
Space Quest IV By Sierra DOS	14
Space Shuttle	17
Sport's Best (3 in 1) DOS	17
Stellar 7 DOS	14
Survey of Western Art MPC	20
The Lord of the Ring	25
Time Table of History DOS	14
Too Many Type Fonts	12
Tool Works Reference Library	16
Total Baseball DOS/MAC	12
US Atlas v3.1 MPC	13
US History DOS/MAC	16
USA Wars: Civil War DOS/MAC	22
USA Wars: Vietnam DOS/MAC	22
USA Wars: WW II DOS/MAC	22
USA Wars: Korea	22
Willy Bearnish The Adventure	14
Windoware	12
Wing Command & Ult VI DOS	14
World Atlas v3.2 MPC	12

CONTROLLERS

IDE 2FD/2HD with 2S/1P/1G	**$9**
IDE with I/O for VESA Local Bus	17
Enhanced I/O (2S/1P) w/16550 UART Chip	25
IDE I/O (2S/1P) w/16550 UART Chip	32
VLB IDE I/O (2S/1P) w/16550 UART Chip	**40**
Adaptec	
1542CF (SCSI)	**154**
1542CFK w/Kit (SCSI)	**222**
2742A EISA (SCSI)	214
2742TK EISA (SCSI)	332
2742T EISA (Twin SCSI)	258
2842 VLB SCSI	**220**
2940K PCI	**186**
2940W (Wide SCSI)	264
Asus EISA (SCSI)	246
Asus PCI (SCSI)	74
BusLogic 445S VLB (SCSI)	204
BusLogic 742K EISA (SCSI)	198
DTC 2290 EISA IDE	110
DTC 2280 ISA IDE	14
DTC 2278 VLB IDE	22
Promise DC-200 IDE Cache Controller	**84**
Promise DC-420 VLB w/512K Cache	98
Promise DC-4030 VLB IDE Cache Controller	**96**

HARD / FLOPPY DRIVES

120MB 19MS IDE	**118**
212MB 15MS IDE	**154**
250MB 15MS IDE	174
340MB 12MS IDE	188
420MB 12MS IDE	**198**
540MB 12MS IDE	**264**
1.0GB 10.5MS IDE	518
340MB 13MS SCSI	238
540MB 12MS SCSI	318
1.0GB 13MS SCSI	**598**
2.0GB 13MS SCSI	**978**
Teac 1.2 / 1.44 Floppy Drive	44 / 34
NEC or Epson 1.2 / 1.44 Floppy Drive	**42 / 32**
3.5" DS/HD High Density Diskettes 10 Pack	**4**

KEYBOARDS

101 Enhanced Keyboard	$13
Focus	
FK2001 101-Key Click	**31**
FK8000 w/Calculator	33
FK9000 Programmable	47
Keytronics 101-Key Enhanced	**23**
Mitsumi 101-Key Enhanced	**13**
Maxiswitch 101-Key Enhanced	20
Maxipro II Programmable	48
Northgate	
OMNI 101 NI / 102 / Ultra	**66 / 66 / 84**

MATH COPROCESSORS

387DX-40 (Tube / Box)	**$28 / 42**
387DX-33 (Tube / Box)	26 / 40
387SX-40 (Tube / Box)	26 / 40
387SX-33 (Tube / Box)	26 / 40
387SX-25 (Tube / Box)	24 / 38

MODEMS & FAXES

2400 Internal Modem	$18
Fax Modem (9648 Fax/2400 Modem)	25
Fax Modem (9600 Fax/2400 Modem)	**32**
Fax Modem (14,400 Fax/14,400Modem) Int.	**58**
Fax Modem (14,400 Fax/14,400Modem) Ext.	88
Fax Modem 28.8 (28.8 Data, 14.4 Fax) Int	**134**
Fax Modem 28.8 (28.8 Data, 14.4 Fax) Ext	158
Pocket Fax Modem (9648/24)	76
Pocket Fax Modem (14,400/14,400)	176
Hayes 14400 Fax Modem Int/Ext	126 / 148
US Robotics	
Sportster 14400 Fax Modem Int	**104**
Sportster 14400 Fax Modem Ext	**124**

MONITORS

14" Mono	**$68**
14" VGA Mono	84
14" Super VGA 1024•768 .39	**164**
14" Super VGA 1024•768 .28 Int	194
14" Super VGA 1024•768 .28 NI	**206**
15" Super VGA 1280•768 .28	280
17" Super VGA 1280•768 .28	**568**
CTX	
14" Super VGA 1024•768 .28 Int	216
14" Super VGA 1024•768 .28 NI	232
CMS1561LR 15" 1024•768 .28	**308**
CPS1760LR 17" 1280•1024 MPR II	598
Hitachi	
CM1584MV 15" 1280•1024 .28	428
CM2095 20" 1280•1024 .31	1,208
MAG	
15F 15" 1280•1024 .28	**360**
17F 17" 1280•1024 .26	**648**
NANAO	
F550I 17" 1280•1024 .28	830
F550IW 17" 1280•1024 .28	**920**
T560I 17" 1280•1024 .25	1,390
F560IW 17" 1280•1024 .26 TRIN	1,158
T660I 20" 1280•1024 .31	2,084
F760IW 21" 1280•1024 .31	1,868
NEC	
3V 15" 1024•768 .28	450
4FGe 15" 1024•768 .28	600
5FGe 17" 1024•768 .28	942
5FGp 17" 1280•1024 .28	1,064
SONY	
15SF 15" 1280•1024 .25 Green	**418**
17SE1 17" 1600•1280 .25	**894**
2036 20" 1280•1024 .30	1,778
20SE1 20" 1600•1200 .30	1,788
VIEWSONIC	
4E 14" 1024•768 .28 Green	244
6E 14" 1024•768 .28 Green	**254**
14E 14" 1024•768 .28	278
15E 15" 1024•768 .28	342
15EX 15" 1024•768 .28 Green	**344**
15 15" 1280•1024 .28 Green	408
17 17" 1600•1280 .28	858
17E 17" 1280•1024 .28 Green	**698**
17G 17" 1280•1024 .28 Green	764
20 20" 1600•1280 .28	1,428
21 21" 1600•1280 .26	1,628

MOUSE / SCANNER

3-Button Microsoft Compatible	**$6**
Logitech	
Cordless	80
Mouseman Serial (OEM) / Bus	**31 / 62**
Trackman	72
Scanman 256 Gray Scale	158
Scanman Easy Touch	196
Scanman Color	346
Microsoft Mouse Serial / Bus (w/System)	**22 / 54**

NETWORK

8 BIT Ethernet Cards (NE1000 Compatible)	$28
16 BIT Ethernet Cards (Coax / 10 Base-T)	**28 / 30**
16 BIT Ethernet Cards (3-in-1 Combo)	**32**
16 BIT Ethernet Cards (Pocket for Notebook)	98
16 BIT Busmaster (NE2100 Compatible)	74
3COM	
3C509 ELINK III Coax / 5 pack	116 / 468
3C509 ELINK III TP / 5 pack	116 / 448
3C509 ELINK III Combo / 5 pack	136 / 528
ARCnet	
4-Port Passive Hub	12
8-Port Active Hub	96
Bus Topology ISA Card (8 BIT / 16 BIT)	40 / 45
Star Topology ISA Card (8 BIT / 16 BIT)	40 / 45
BootROM	
8 BIT or 16 BIT Auto Boot PROM	12
Hubs and Repeaters	
4-Port 10 Base T HUB	104
12-Port 10 Base T HUB	264
16-Port 10 Base T HUB	328
2 BNC Ethernet Repeater	178
Novell Netware (OEM)	
v3.12 5/10/25/50 User	538/1,158/1,688/2,228
v4.01 5/10/25/50 User	768/1,458/2,058/2,678

PRINTERS

Citizen	
GSX-190 (9-Pin) / GSX-220 (24-Pin)	**$158 / 168**
GSX-230 / GSX-240 (24-Pin) Quiet	228 / 288
GSX-145 (24-Pin) Wide	358
Color Option for Citizen Printers	48/68
Panasonic	
KX-P1150 (9-Pin)	**138**
KX-P2023 (24-Pin) Quiet	182
KX-P2124 (24-Pin) Color Capacity	316
KX-P3624 (24-Pin) Wide	398
Color Upgrade Kit KX-PCK11	54

TAPE BACKUP

Conner 250MB Int	**$126 (w/tape$136)**
Colorado	
DJ-10 Tape Back-up 120MB	93
DJ-20 Tape Back-up 250MB (OEM/ORIG)	**144/150**
KE-9 Ext. Kit for DJ-10/Dj-20	62
Tape QIC-80 3M DC2120	13
JT-20 Trakker 250MB Ext	**298**
PT-10 Power Tape 1.0GB Int	644
PT-25 Power Tape 2.4GB Int	924
PT-50 Power Tape 4GB Int	1,128

VGA CARDS

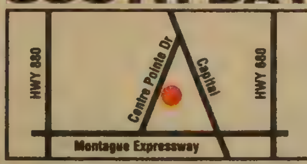
VGA 256K	$24
SVGA 512K 16 BIT	34
SVGA 1MB 1024•768 16 BIT	**53**
Window Accelerators w/1MB	53
Cirrus Logic / Trident VLB w/1MB	**63**
ATI	
Ultra 1MB w/Mouse	148
Wonder PCI / VLB / ISA 1MB DRAM	**112**
Ultra Plus PCI / VLB / ISA 2MB DRAM	166
Ultra Pro PCI / VLB 2MB (VRAM)	**222 / 212**
Ultra Pro EISA 2MB (VRAM)	**276**
ProTurbo 64 PCI / VLB / ISA 2MB (VRAM)	**268**
ProTurbo 64 PCI / VLB / ISA 4MB (VRAM)	458
Diamond	
Speed Star Pro 1MB VLB / ISA	**94**
Speed Star 64 PCI 1MB (DRAM)	**118**
Stealth 24 ISA / VLB 1MB	120
Stealth 32 PCI / VLB 2MB (DRAM)	168 / 172
Stealth 64 PCI / VLB 2MB (VRAM)	278 / 298
Stealth 64 PCI / VLB 4MB (VRAM)	448
Stealth Pro VLB / ISA 1MB / 2MB (VRAM)	198 / 274
Viper 2MB (VLB)	278
Viper SE 2MB (PCI)	**268**
Genoa 8500 VLB 1MB	85
Orchid	
Celsius VLB 1MB / 2MB	**118 / 174**
Fahrenheit 1MB (S3-801) ISA	118
Fahrenheit 1MB (S3-805) VLB	128
Kelvin EZ VLB 1MB (DRAM)	**98**
Kelvin VLB (64-Bit) 1MB / 2MB	**128 / 176**
Kelvin PCI (64-Bit) 1MB / 2MB	**128 / 176**

TERMS AND CONDITIONS

1. One year parts and labor warranty on systems.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only Hi-Tech USA brand computers, excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.

Monday - Friday: 8:30am to 6pm / Saturday: 10am to 4pm

SOUTH BAY



Phone (408) 262-8688
1558 & 1562 Centre Pointe Drive
Milpitas, CA 95035 Fax (408) 262-8772

HI-TECH USA

PENINSULA

Holly
El Camino Real
Industrial Road
US 101
Whipple Ave

Phone (415) 508-8688
9818 Industrial Road
San Carlos, CA 94070 Fax (415) 508-

menu and tool bar. Online help is available, and reports can be generated using the Project report writer. ($349.95; $149.95 if ordered by October 15, 1994) Program Management Solutions Inc., 553 N. Pacific Coast Hwy., Suite B-177, Redondo Beach, CA 90277. (310)374-0455.

Reviews

Game Reviews

Buzz Aldrin's Race Into Space

Designed By: Fritz Bronner
Published By: Interplay
For: 286, VGA/MCGA, Microsoft mouse, Adlib/Sound Blaster/Pro-Audio/Roland/Gravis
List Price: $34.99
Reviewed By: Fred Haslam

BUZZ ALDRIN'S
RACE INTO SPACE

Race Into Space looks like a computerized version of TFG's paper game Liftoff. Many of the mechanics are the same, but this game takes good advantage of the computer's capabilities to reduce bookkeeping and emphasize the personal side of the space program. The dozens of movie clips from actual space flights makes the game very attractive and exciting.

It simulates the American/Russian race to the moon during the '60s and early '70s. As director of either program, you invest your budget into research, equipment, and astronaut training. The primary conflict is safety versus time. In order to maintain a high budget, you must perform "space spectaculars." This means performing key missions before your competitor does.

The interface is innovative. The primary screen is a picture of Cape Canaveral and all the buildings are buttons. The controls are easy to use, but you will have to consult the rules to understand what you are doing. There is little music, and sound is incidental except for the movie clips.

Race Into Space is a somewhat challenging strategy game. The best part is watching the movies strung together to play out your space missions. Waiting to see if things go boom or bust is both tense and exciting. (Interplay, Inc., 17922 Fitch Ave., Irvine, CA 92714. 714/553-6678)

Gobliiins

Designer: Pierre Gilhodes & Muriel Travis
Publisher: Sierra On-Line
For: IBM 386, MS-DOS 5.0, 2MB RAM, CD-ROM, mouse required, standard sound cards and sound cards with DAC
List Price: $19.99
Reviewed By: Fred Haslam

Gobliiins is a cute little puzzle game. In fact, cute is what sustains this game. The puzzles are obvious, abstruse, or uninteresting. I got stuck on screen number four. Even with the combined brainpower of family and friends—not to mention reading the rules front to back then back to front—I never got further.

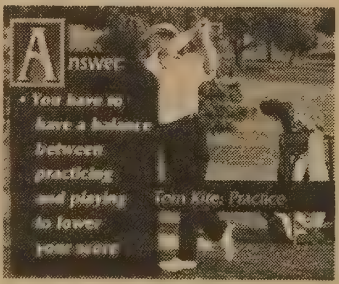
In this story, you control a trio of goblins who are trying to get a potion to cure their king who has been driven mad. Each of your three goblins has a different specialty: a warrior who can bonk things and climb; a wizard who can transform objects; and a grunt who can pick things up and use them. Between these little guys you manipulate the objects on-screen to solve a puzzle.

The interface is adequate, but you need to read the rules to understand what I outlined in the above paragraph. The artwork is cute. The animation is average. The music and sound effects are also cute. The whole darn thing is cute.

As a puzzle game Gobliiins is more frustration than reward. I haven't given a good review to any puzzle game as yet, but there are some I do like—The 7th Guest and Lemmings come to mind. So when I say that this game leaves me tepid, understand that it is not because I dislike puzzle games. (Sierra On-Line, Inc., P.O. Box 800, Coarsegold, CA 93614-0800. 209/683-4468)

Lower Your Score With Tom Kite—Shot Making

Published By: Intellimedia Sports
For: Windows MPC
List Price: $79.95
Reviewed By: Mark Will


Answer
• You have to have a balance between practicing and playing to lower your score

Need a little help with your golf game? If so, then Intellimedia's new interactive CD-ROM golf title, Lower Your Score With Tom Kite—Shot Making, may be just the title for you. This program comes as a two-CD set narrated and demonstrated by 1992 U.S. Open Champion Tom Kite, winner of nineteen PGA tour events and the PGA's all-time leading money winner. The first disc features introductions by Tom Kite and prominent sports psychologist Dr. Bob Rotella, stroke savers, sand shots, trouble shots, special shots, and games around the green. The second disc, Ask the Pro, features audio and still slides, and consists of a question and answer format which allows you to get score-improving advice from Kite and Rotella on all aspects of the game. Also, simply by registering the product you can obtain another free CD-ROM with still more advice from Kite and Rotella on various aspects of the game. Another golf title due out later will concentrate on the full swing.

The interface to using the product is simple and straightforward. You simply select the topic you want advice or instruction on and double click on it. The pull-down menus that appear when you start the product have nice Index and Help options. The Index option allows you to select a particular video or audio by breaking the skills down by a particular golf club or mental aspect. Unlike some titles, there is no searchable text. It would have been nice if a golf simulation or the rules of golf had been included.

Installation is straightforward and creates a separate program group with two icons, one for each of the two discs. The install program will want to modify your system configuration files. It does this not only to make the video play more smoothly, but also so that the QuickTime video play modules can be found. While the installation instructions are not very explicit about it, Intellimedia suggests using the highest color resolution (at 640 x 480) that your video card and Windows system resources will permit.

The minimum system requirements include a 25MHz 486, single-speed CD-ROM, and 4MB RAM, while the recommended requirements are a 33MHz 486, 8MB RAM, and a double-speed drive. I experienced no performance problems with the recommended requirements, but I did have a problem with a "washed out" look to the video at 256-color resolution. This disappeared at higher color resolution settings. (Intellimedia Sports, Inc., Suite 300, Two Piedmont Center, Atlanta, GA 30305. 1-800-269-2101)

READ WHY OUR PENTIUMS ARE BETTER!

WE MAKE SURE THAT OUR COMPUTERS PERFORM WITH YOUR SOFTWARE. Our trained professionals are always on hand to answer and assist you with any technical questions and support. All our systems are hand built with top quality parts at our location to your specifications.

WE GUARANTEE YOU LIFETIME TECHNICAL SUPPORT, DIAGNOSTICS, AND UPGRADES FOR AS LONG AS YOU OWN THE COMPUTER. Since 1985 R-Computer has been building computers that you can count on.

486-66
W/256K CACHE
340MB HARD DRIVE
SVGA SYSTEM

- 486-66MHZ W/128K CACHE CPU
- 4MB RAM
- 340MB WESTERN DIGITAL HARD DRIVE
- VIEWSONIC SVGA MONITOR
- SVGA CARD
- 1.2 OR 1.44MB FLOPPY DRIVE
- DX4-100MHZ UPGRADABLE

COMPLETE SYSTEM WITH
DELUXE CASE AND KEYBOARD

$1472 *Add $350 for 100MHZ*

ULTRA-CADD
486-66 VLB
8MB 420MB HARD DRIVE
SVGA SYSTEM

- 486-66MHZ W/256K CACHE
- 8MB RAM
- 420 W.D. HARD DRIVE
- VIEWSONIC 17G SVGA ULTRA HIGH 17" MONITOR WITH 76HZ REFRESH RATE
- ORCHID KELVIN VLB VIDEO CARD W/1MB
- 1.2 OR 1.44MB FLOPPY DRIVES
- DX4-100MHZ UPGRADABLE

COMPLETE SYSTEM WITH
DELUXE CASE AND KEYBOARD

$2296 *Add $40 for PCI*

PENTIUM PCI
P54-90MHZ PIRANA

- P54-90MHZ INTEL PROCESSOR
- PCI LOCAL BUS W/256K CACHE
- 8MB RAM
- PCI LOCAL CONTROLLER
- ORCHID KELVIN PCI 64-BIT VIDEO ACCELERATOR
- 420MB W.D. SCSI HARD DRIVE
- VIEWSONIC 15" 76HZ SVGA .28DP MONITOR
- TEAC 1.2 OR 1.44 FLOPPY DRIVE
- 16550 AFN HIGH SPEED I/O PORTS
- DELUXE CASE AND KEYBOARD

$2746

PENTIUM PCI
P5-60MHZ POWER

- P5-60MHZ INTEL PROCESSOR
- PCI LOCAL BUS W/256K CACHE
- 8MB RAM
- PCI LOCAL CONTROLLER
- ORCHID KELVIN PCI 64-BIT VIDEO ACCELERATOR
- 340MB WD HARD DRIVE
- VIEWSONIC SVGA .28DP MONITOR
- TEAC 1.2 OR 1.44 FLOPPY DRIVE
- 16550 AFN HIGH SPEED I/O PORTS
- DELUXE CASE AND KEYBOARD

$2272

486-25
212MB HARD DRIVE
SVGA SYSTEM

- 486-25MHZ CPU
- 4MB RAM
- 212MB WESTERN DIGITAL HARD DRIVE
- VIEWSONIC SVGA MONITOR
- SVGA CARD
- 1.2 OR 1.44MB FLOPPY DRIVE
- DX4-100MHZ UPGRADABLE

COMPLETE SYSTEM WITH
DELUXE CASE AND KEYBOARD

$1192

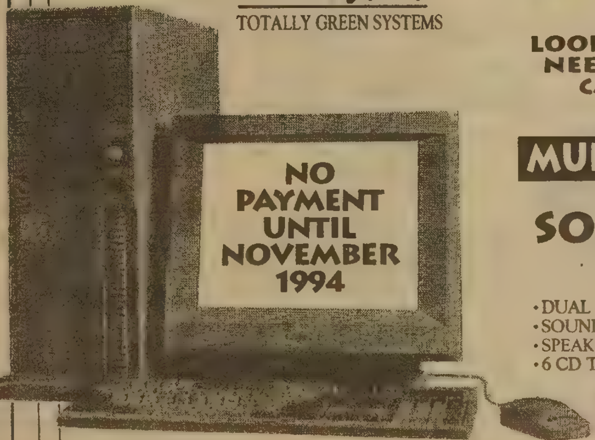
COMPLETE 486 MULTI-MEDIA SYSTEM

- 486-33MHZ W/256K CACHE CPU
- 4MB RAM
- 270MB QUANTUM HARD DRIVE
- VIEWSONIC SVGA MONITOR
- SVGA CARD
- 1.2 OR 1.44MB FLOPPY DRIVES
- SOUND BLASTER
- PANASONIC CD-ROM
- SPEAKERS
- MICROPHONE
- SPECIAL 5 TITLE CD BUNDLE
- DX4-100MHZ UPGRADABLE

COMPLETE SYSTEM WITH
DELUXE CASE AND KEYBOARD

$1579

energy
TOTALLY GREEN SYSTEMS



MULTIMEDIA

**LOOKING FOR MULTIMEDIA?
NEED PERSONAL SERVICE?
CALL US, WE'LL HELP YOU**

MULTI-MEDIA SPECIAL

SOUND BLASTER PRO 16 KIT

- DUAL SPEED CD ROM
- SOUND BLASTER
- SPEAKERS
- 6 CD TITLES

- Aldus Photostyler
- Gallery Effects
- Digital Morph
- Lemmings
- Indy 500

$329

SMALL OFFICE HOME OFFICE

Simplify your life
Maximize your time

See Us for your Small Office Home Office Solutions

See the complete line of Viewsonic Monitors in our showroom!

VIEWSONIC MONITORS

VIEWSONIC 4	275
VIEWSONIC 6	295
VIEWSONIC 14E	355
VIEWSONIC 15E	389
VIEWSONIC 15	459
VIEWSONIC 17G	799
VIEWSONIC 17	949
VIEWSONIC 20	1549
VIEWSONIC 21	1745

VIDEO GRAPHICS

TRIDENT 9000	$39
TRIDENT 8900	59
ORCHID CELSIUS	99
DIAMOND SPEEDSTAR PRO VLB	119
DIAMOND STEALTH	139
FAHRENHEIT 1280	139
ORCHID KELVIN 64	169
DIAMOND STEALTH PRO	219
DIAMOND VIPER	329
MATROX-NUMBER 9	CALL

SERVING YOU FOR OVER 9 YEARS

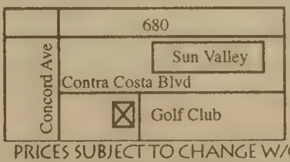
R-COMPUTER

COMPUTERS THAT STAND THE TEST OF TIME

(510) 798-4884

30 GOLF CLUB ROAD, PLEASANT HILL, CA 94523
MON-WED-FRI 9-6 TUE-THUR 9-8:00 SAT 10-5

PERSONALIZED SERVICE WITH CUSTOM CONFIGURATION
LANtastic Authorized Dealer



PRICES SUBJECT TO CHANGE W/O NOTICE.

Telecommunications Hardware Review

Konexx Koupler Model 204

Manufactured By: Unlimited Systems
List Price: $149
Reviewed By: Matthew Leeds

If you've ever been stuck in a hotel room trying to pry the phone connector off the wall so that you could jumper your modem into the phone system, or stood staring at the only pay phone for miles with no way to connect your laptop, the Konexx Koupler is a gift from heaven. It's an acoustic coupler that attaches to the handset of a phone and a phone cord with an RJ-11 plug that connects to your modem. The Koupler has a pair of adjustable rubber cups and a Velcro strap that insure a tight connection with just about any phone. The Koupler holds a standard 9V alkaline battery that powers it for over thirty hours.

According to Unlimited Systems, the Model 204 works at up to 14,400bps on electronic phones such as usually found with PBX systems (in fact you can't usually connect a modem to the digital lines used by modern PBXs). In my tests, I was able to get speeds up to 19,200bps. Older phones that use carbon-granule microphones, found in many pay phones, may only support speeds of 2400bps. The Model 204 weighs only 9 ounces and easily tucks into the corner of a laptop carrying case.

I did need to manually dial the phone and tell my modem to connect via an AT command, but this was easy to do and a small price to pay for essentially universal connectivity. Managing this on a pay phone may take a little patience, but it's far easier than tearing the handset apart, or hunting for one of the few pay phones that supply a modem jack.

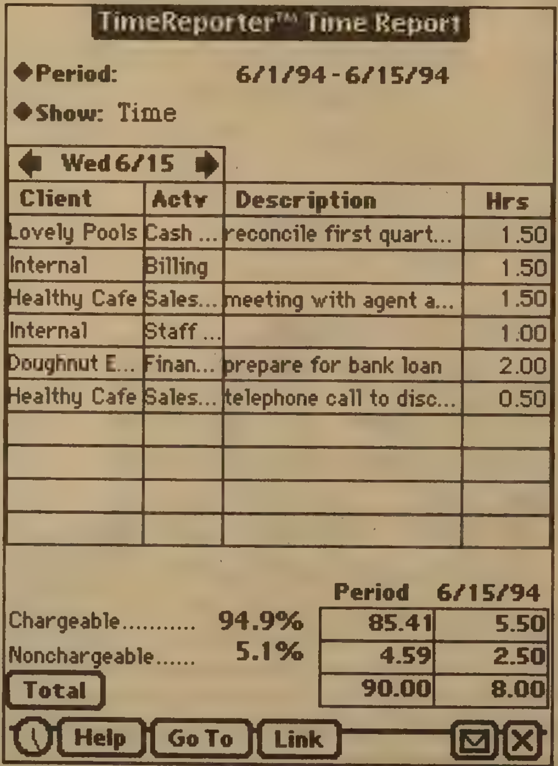
Unlimited Systems sells other Konexx models. One is an acoustic coupler with a fax/modem built-in. Another is an interface into digital PBX phone lines for modems or fax machines. Many of the interface kits can be purchased in a deluxe version with additional phone cables with alligator clips, screwdriver, duplex RJ-11 adapter, and spare 9V battery. I highly recommend the Model 204 for road warriors who need to connect from everywhere. (Unlimited Systems, Inc., 8586 Miramar Pl., San Diego, CA 92121. 619/622-1400)

Newton Software Review

Time Reporter

Published By: Iambic Software, Inc.
List Price: $129
Reviewed By: Matthew Leeds

Anyone who has made the leap of faith in buying a Newton has made a commitment to keeping at least part of their life stored in electronic form. Iambic's Time Reporter brings a new level of organization and functionality to that storage. It's designed for professionals who need to track the time they spend during the day, particularly for those who bill their time.


TimeReporter™ Time Report

◆Period: 6/1/94 - 6/15/94

◆Show: Time

Wed 6/15

Client	Actv	Description	Hrs
Lovely Pools	Cash ...	reconcile first quart...	1.50
Internal	Billing		1.50
Healthy Cafe	Sales...	meeting with agent a...	1.50
Internal	Staff ...		1.00
Doughnut E...	Finan...	prepare for bank loan	2.00
Healthy Cafe	Sales...	telephone call to disc...	0.50

		Period	6/15/94
Chargeable..........	94.9%	85.41	5.50
Nonchargeable......	5.1%	4.59	2.50
Total		90.00	8.00

Time Reporter requires 350K of free RAM, either on the Newton itself or on a PCMCIA card. It also requires the Connection Kit and either a Mac or Windows machine. Data created in Time Reporter can be transferred back to a PC or Mac in tab- or comma-delimited form.

Time Reporter links to the built-in Newton calendar or the Names file. You can add clients, projects, activities, or expense categories. The main interface is the Time Report. Here you can pop up a time entry screen for each line in the Time Report. Each time entry screen has pop-up menus for the client, project, activity, start and end times, date, and description of the entry.

Reports include the Client Breakdown, the total hours and percent of time spent with each client over a given time period; the Activity Breakdown, the total hours and percent of time spent on each activity over a given time period; and the Client Detail, the amount of time spent with or expenses for a given client. Reports can be printed, beamed, or faxed with the appropriate hardware connection.

Time Reporter has an elegant interface and takes less than an hour to get set up and learn. It makes an essential professional task easier to accomplish, and provides useful analysis and reports. (Iambic Software, Inc., 243 Buena Vista Dr., Suite 204, Sunnyvale, CA 94086. 408/730-0266)

Book Review

Morphing On Your PC

Author: David K. Mason
Published By: The Waite Group Press
List Price: $29.95 including software
Reviewed By: Pamela Mason

Morphing on Your PC, by David K. Mason, is primarily an expanded user's manual for the shareware utilities that come on the two disks included with the book: DMorph, DTA (Dave's Targa Animator), and the Trilobyte flic player. As you learn to use the programs, the book offers a basic introduction to morphing that includes the differences between 2-D (image) and 3-D (object) morphing, myths and legends, and the history and development of morphing. (There was just one slight omission here, not crediting Tom Brigham as the originator of morphing.) Other potential uses for morphing and warping are mentioned, such as before and after images for cosmetic surgery, forensics, and age regression in missing person cases.

Continued on page 320

486SLC2 66MHz

VESA LOCAL BUS SYSTEM MINI TOWER CASE

COMPLETE SYSTEM PRE-BUILT AND TESTED!

IBM Manufactured 486SLC2-66MHz Motherboard with CPU • Vesa Local Bus
4MB RAM • 3.5" 1.44MB Floppy Drive • 213MB Hard Drive • Serial/Parallell
Keyboard • DOS • Windows • Mini Tower Case
Video Card and Monitor Sold Seperately.

$999.95

#1858406

MORE COMPUTER BUYS FROM FRY'S!

486SLC2-50MHz 120MB NOTEBOOK

486SLC2-50MHz CPU • 4MB RAM • 120MB Hard Drive
3.5" 1.44MB Floppy Drive • Serial / Parallel
VGA Output • LCD Display • DOS 6.2
Mouse port

$1099

Innex 4150-412
#1905236

MiTAC

486SX-25MHz 130MB SUB-NOTEBOOK

486SX-25MHz CPU • 3.5" 1.44MB Floppy Drive • 4MB RAM • 130MB Hard Drive • Trackball • PCMCIA • 2 Slots • DOS • Windows

$1199

#1863998

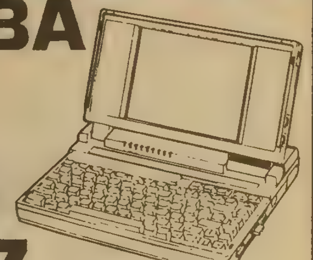
MiTAC

486SX 33MHz 120MB COLOR NOTEBOOK

486SX 33MHz CPU • 3.5" 1.44MB Floppy Drive
4MB RAM • 120MB Hard Drive • 5.9 Lbs.
Serial/Parallel Ports • VGA Graphics • Passive Color Screen

$1499

#1815320



TOSHIBA T3400 486SL 33MHz SUB-NOTEBOOK

486SL-33MHz CPU • 4MB RAM • 4.1 lbs.
External 3.5" 1.44MB Floppy Drive • Integrated Pointing Device
PCMCIA II

$1499

#1856862

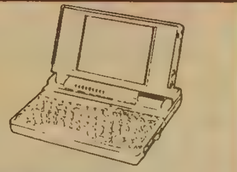
Avanti

486DX2-66MHz 200MB COLOR NOTEBOOK

486DX2-66MHz• 4MB RAM • 200MB Hard Drive • 3.5" 1.44MB Floppy Drive
MS DOS
Window
PCMCIA II
Trackball

$2595

#1914870

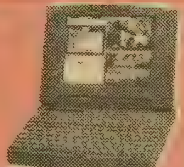


AMBRA 486SL 25MHz DUAL SCAN COLOR NOTEBOOK

486SL-25MHz • 4MB RAM • 1.44 Floppy Drive • 120MB Hard Drive
Fax/Modem • PCMCIA • Trackball • Serial/Parallel

$1799

#1933495



NEC UltraLite® Versa™ 486DX2-50MHz 209MB COLOR NOTEBOOK

486DX2-50MHz CPU • 4MB RAM • 209MB Hard Drive
Active Matrix Color • 3.5" 1.44MB Floppy Drive • Two PCMCIA Slots
Limited Supply on Hand.

$4199*

50EC
#1872509

*After $200
Mail-In Rebate
In-Store Price ..
$4399

ALL-MEDIA CASE

Stackable, includes key lock
Configures to file:
150- 3.5" disks
140- 5.25" disks
12 Data Cartridges
34 CDs or CD ROM
Up to 27 Mini Data CARtridges
Up to 75 3.5" Optical Disks
Up to 16 5.25" Optical Disks
Bernoulli, Syquest, and more...

$7.99

INNOVATIVE CONCEPTS, INC

#1685961

2MB MEMORY

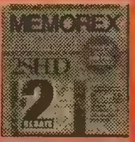
FOR HP IIIP, IIP+, III & IIID PRINTERS

DELKIN DEVICES

$115.99

#1762114

MEMOREX
COMPUTER SUPPLIES


MEMOREX
2HD
2

3.5" DS/HD HIGH-DENSITY IBM FORMATTED DISKETTES

10 PACK

$4.99*

*After $2 Mail-In Rebate. In-Store Price... $6.99

#1904268

SIIG, Inc.

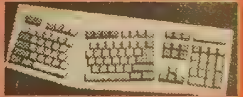
HighSpeed I/O
IO Professional

HIGH SPEED I/O IDE CONTROLLER

16550 Serial w/ 2.88MB FDD w/IDE Interface
HI-Speed16550 Serial • Hi-Speed EPP/ECP Parallel • IDE Interface up to 2.88MB Floppy Controller Game Port

$69.95

#1884423



NTC ERGONOMIC 102-KEY KEYBOARD

It's the perfect choice for users who spend a great deal of time at the keyboard. Its main feature is that it lets you adjust the left and right-hand sections up to a 30-degree angle to find the typing position that feels right for you

$69.99

KB-7000
#1881350

Fry's ELECTRONICS

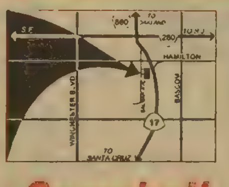
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Prices Good Through September 13, 1994

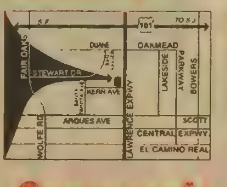
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

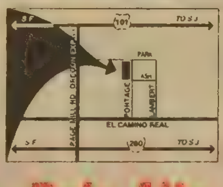
CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

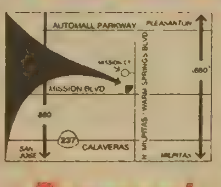
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
LAWRENCE EXPWY
CENTRAL EXPWY
WOLFE RD
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


S.F.
101
TO S.J.
PAGE MILL RD
OREGON EXP.
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard

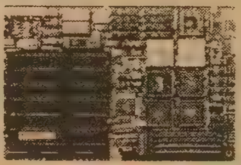
VISA AND MASTERCARD ACCEPTED

486DX2-66MHz MOTHERBOARD

486DX2-66MHz ISA
0K Expandable to 32MB RAM
0K Expandable to 256K Cache
CPU sold separately
#1902509

$59⁹⁵

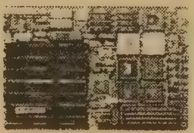
486 MOTHERBOARD VESA LOCAL BUS



486 Universal Motherboard uses SX or DX CPUs
2 Vesa Local Bus Slots
0K Cache Expandable to 256K
No CPU
#1936432

$69⁹⁵

MOTHERBOARD

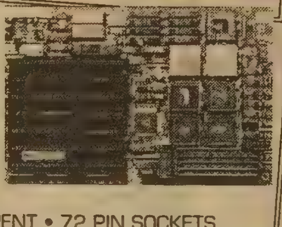


3 VESA LOCAL BUS SLOTS WITH 256K CACHE

486DX2-66MHZ
Deluxe Motherboard
256K CACHE
3 VESA Local Bus Slots
No CPU
#1856323

$149⁹⁵

DEEP GREEN 486 DX4-100 OR DX2-66 VESA LOCAL BUS DELUXE MOTHERBOARD



486 VLB • 3 VLB SLOTS • ZIF SOCKET • POWER MANAGEMENT • 72 PIN SOCKETS
INTEL/CYRIX JUMPER • DX-2/DX-4 JUMPER SETTINGS
256K CACHE
ENERGY SAVER
WORKS WITH GREEN PS
CPU SOLD SEPARATELY
#1842913

$199⁹⁵

LEADING EDGE

486DX-33MHz

WHILE THEY LAST

260MB SVGA SYSTEM

80486DX-33MHz CPU/Motherboard
4MB RAM Expandable To 32MB
260MB Hard Drive • 5.25"1.2MB/3.5"
1.44MB Dual Floppy Drive
2 Serial/1Parallel • Monitor Not Included
#1915941

* After $75 mail-in rebate.
In-store price $1074.

$999*

LEADING EDGE

486DX2-66MHz

WHILE THEY LAST

260MB SVGA SYSTEM

80486DX2-66MHz CPU/Motherboard
4MB RAM Expandable To 32MB
260MB Hard Drive • 5.25"1.2MB/3.5" 1.44MB
Dual Floppy Drive • MS DOS • MS Windows
2 Serial/1Parallel • Case/Power Supply
Monitor Not Included
#1921733

* After $100 mail-in rebate.
In-store price $1299.

$1199

AT&T 486SX2-50MHz

270MB SVGA SYTEM

486SX2-50MHz • 270MB Hard Drive
4MB RAM • VLB SVGA
1.44MB, 1.2MB Floppy Disk Drives
2 Serial/1 Parallel • DOS • WIN
Works
#1928992

* After $200 mail-in rebate.
In-store price $1199.

$999*

MINI TOWER COMPUTER CASE

WITH POWER SUPPLY

#1742428

$39⁹⁵

Panasonic
Office Automation

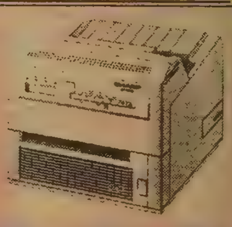
KX-P1150 DOT MATRIX PRINTER

- 240cps draft print speed
- 4K buffer capacity frees up the computer
- Windows 3.1 driver included
- 2 year limited warranty
- 7 Resident fonts

#1839283

$139

SHARP



JX-9460 POSTSCRIPT LASER PRINTER

600DPI • 6 Pages Per Minute • Postscript
250 Sheet Paper Tray • 5,000 Page Toner Yield
2MB RAM with SOFTBAND (Comparable To 6MB)
Appletalk Upgradeable • RISC Processor
One Year Warranty #1849633

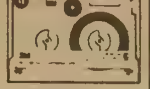
$869

Charlie Chip Says:
"Your Best Computer Buys Are Always At...

Fry's ELECTRONICS

DATA CARTRIDGES

3M

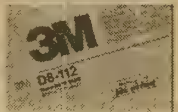


4MM DATA CARTRIDGE

2 Gigabyte 4mm, 90 meters long
Helical Scan Data
Grade Certified
DDS-90 #1865679

$13.99

3M



8MM DATA CARTRIDGE

5 Gigabyte Data Tape
8mm x 112 Long
Compatible with all 2.3 Gigabyte, 2.5 Gigabyte and 5 Gigabyte 8mm Tape Drives • D8-112 #1620968

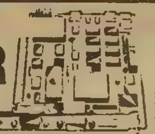
$10.99

1024 X 768 14" .28mm NON-INTERLACED SVGA MONITOR

1024 X 768 • .28 Dot Pitch • Non-Interlaced
One Year Warranty #1657506

$249

1024 X 768 16-BIT SUPER VGA CARD



Super VGA 1024 X 768
256K Expandable To 512K RAM
#1611564

$39.95

15" LARGE SREEN SVGA MONITOR

1024 X 768 • .28mm DOT PITCH
NON-INTERLACED 15" LARGE SCREEN
IS1528N5 #1825611

$299

Parana

752 INK REFILL BLACK TWIN PACK

FOR HP DeskJet and DeskWriter Series
HP51626A Cartridge #1889015

$14.99

Xtend

SuperMouse 3-IN-1 MOUSE!

SuperMouse

Desktop Mouse: Ergonomic design for hours of comfortable use
Portable Mouse: Snap out of cradle for travel use
Hand-Held Mouse: Unique "Re-orient" software for hand held comfort
#1932276

$79.99

TV GAMER PLUS PLAY COMPUTER GAMES ON YOUR TV

TV
PL
US
PLAY
TV

TV GAMER PLUS

NTSC/TV Converter. Play Computer games on TV. Video presentations and more. #1890972

$159.95

ANTEC

TVIATOR PC TO TV PORTABLE PRESENTATION PARTNER

#1807525

$199.95

Labtec

MULTIMEDIA COMPUTER SPEAKERS

High efficiency micro stereo speakers. • 2.25" stereo speakers • 4 ft. cord with 3.5mm stereo plug to fit most personal radios and cassette players • One year warranty
SS11
#1931013

$4.77

POCKET COMBO 10 BASE-T AND COAX POCKET ETHERNET ADAPTER

Plugs into parallel • EPP support
#1901612

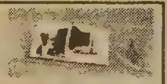
$189.95

BYTE BROTHERS LOCKING UP EVERYTHING!

This universal kit secures office and home equipment using solid metal parts and super bond adhesive plates.
#189945

$39.95

ScanTrac



Guide for Handheld Scanner

- Increase your OCR's speed to recognize text.
- Scan both sides of a page without moving the artwork.
- Compatible with Pc and MAC scanners.
- Designed to achieve flatbed accuracy at a fraction of the cost.
- Easy to assemble. #1639937

$29.99

ANTEC

3.5" EXTERNAL SCSI CASE ENCLOSURE FOR SCSI HARD DRIVE

For SCSI Hard Drive, Tape, and CD-ROM
KS-410+P
#1790432

$79.95

386SX 40MHz MOTHERBOARD

386SX 40MHz MOTHERBOARD
0K EXPANDABLE TO 16MB #1757943

$69.95

ACI
American Covers Inc.

MOUSEKLIP

- Attaches to any Mouse Pad
- Keeps mouse cord clear of work area
- Works with any computer mouse

#1902381

$2.29

TARGUS
A TRADITION OF EXCELLENCE

NOTEPAC

Notebook Carrying Case

14" x 11" x 2.5" (Interior Dimensions)
13" x 9" x 2" (Pocket Dimensions)
Compatible with Powerbook and all popular Notebooks. Available In Assorted Colors.
#1693283

$29.99

PCMCIA 170MB HARD DISK

- PCMCIA 85/170MB Hard Disk
- Fits any PCMCIA slot
- Type III • Rugged and removable
- Snap to transfer data #1896185

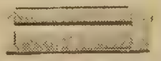
$299.95

THRUSTMASTER FLIGHT CONTROL SYSTEM

Replica of the F-4 flightstick
Multi-function • IBM Compatible
#1852581

$79.99

VISIONEER PaperMax Personal Scanner



Instantly distribute documents using electronic fax or mail.
Includes:
- MaxMate Document Communications Software
- MaxMate Viewer for DOS, Windows, and Macintosh
- Power Supply • Serial Cable
- Easy to understand User's Manual

#1926200

$499

Fry's ELECTRONICS
HOME OF FAST, FRIENDLY, COURTEOUS SERVICE

Limit Rights Reserved
Not Responsible For Typographical Errors

STORE HOURS
MON - FRI
8AM - 9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

Prices good thru September 13, 1994

VISA AND MASTERCARD

CAMPBELL 600 E. Hamilton Ave. (408) 364-3700
CORPORATE P.O. FAX # (408) 364-3595
SUNNYVALE 1177 Kern Ave. (408) 733-1770
CORPORATE P.O. FAX # (408) 735-6800
PALO ALTO 340 Portage Ave. (415) 496-6000
CORPORATE P.O. FAX # (415) 496-6044
FREMONT 440 Mission Ct. (510) 770-FRYS (3797)
CORPORATE P.O. FAX # (510) 770-3700

Authorized Reseller

Macintosh Accessories

Authorized Reseller

Apple® PowerBook® 520 Color 4/160

68LCO40 Processor • 50/25 MHz Speed • Passive Matrix Color Display • 4MB RAM, expandable to 36MB • Internal Apple SuperDrive® Floppy Disk Drive, Internal 160MB Hard Disk Drive Three expansion slots- One for a processor direct card, One for an internal modem, and One for RAM • Serial port ABD™ port Video-output port • Power adapter port Sound-input (mono) port and integrated microphone Sound output (stereo) port and speakers SCSI port.

Authorized Reseller

$2799

#1916517

Apple® PowerBook® 540 4/240

is Apple's top-of-the-line monochrome PowerBook computer. Its active-matrix display and fast processor make it an ideal system for business users who use spreadsheet and page-layout applications. 68LCO40 Processor • 66/33 MHz Speed • 4MB RAM • Internal 240MB Hard Disk Drive • Three expansion slots- One for a processor-direct card, One for an internal modem, one for RAM

Authorized Reseller

$2999

#1916481

Hayes ACCURA 14.4 FAX/MODEM EXTERNAL MODEM

14.4 Modem and Fax
External Mac

$149.99

Hayes #08-01177
#1834901

AppleCD™ Multimedia Kit

The high-performance AppleCD™ Multimedia Kit offers all you need to advance your Macintosh® into the CD-ROM and multimedia revolution. It comes complete with an external AppleCD™ 300 external CD-ROM drive, AppleDesign™ Powered Speakers, all necessary cables and Compton's Encyclopedia with three mail-in additional CD-ROM titles.

Authorized Reseller

$459

#1834370

Apple® PowerBook Duo® 280C

is Apple's top-of-the-line color sub-notebook computer.

Features include: 66/33MHz Speed • 4MB of RAM expandable to 40MB • Internal 320MB hard drive • High performance Motorola 68LCO40 processor. • Built-in, active matrix color display • Ability to accommadate a future version of the PowerPC™ processor • PowerBook® Mobility Bundle preinstalled software

Authorized Reseller

$3999

#1916573

Apple® PowerBook Duo® 280

68LCO40 Processor • 66/33 MHz Speed 4MB RAM, expandable to 40MB • Optional external Apple SuperDrive Floppy Disk Drive, Internal 240MB Hard Disk Drive • Serial Port Docking Connector • Power Adapter Port Modem Port • Integrated Microphone and Speakers • 9" backlit active-matrix display with 16 levels of gray.

Authorized Reseller

$2999

#1916539

SUPERMAC TECHNOLOGY e-machine PowerLink™ presenter

MINI-DOCK FOR DUO NOTEBOOKS

Plug in PowerLink Presenter to your Apple PowerBook Duo and you instantly have created a powerful presentation system you can take with you anywhere. It provides up to 256 colors (8-bit) on displays from 12-16/17 inches in size, at resolutions from 630 X 800 to 832 X 624. And you can even use it display on a standard TV set using its on-board video encoder and NTSC video connector.

$449

#1822216

Technöggin POWERPLATE 3X

Provides up to three times the battery life of a PowerBook battery alone. Integrated design can attach to a PowerBook. Indicators show charging status • "Smart" two-stage charging Replaceable batteries last approximately 800 - 1400 charges • PowerPlate and internal PowerBook battery are simultaneously charged.using your PowerBook AC adapter

$239.95

#1893908

Apple® Newton® MessagePad™ 110

Your Personal Assistant With All The Right Connections.

Connect to Windows and Macintosh® computers. • Communicate via fax, E-mail, and paging. • Expand capabilities with great software titles. • Manage your time better than ever.

Authorized Reseller

$599

#1894862

Newton® PRINT PACK

THE EASY WAY TO CONNECT YOUR PARALLEL PRINTER TO A NEWTON.

The Print Pack comes with all the software and hardware you need for your parallel printer with your Newton MeassagePad. It works with the most popular laser printers, dot-matrix printers portable ink-jet and thermal printers, and other printers that are compatible with MS-DOS and Windows-based computers.

Authorized Reseller

$99.99

#1812558

Newton® POCKET CALL

CONNECT TO A WORLD OF INFORMATION... ANYTIME, ANYWHERE!

- Electronic Mail
- News, Sports, and Weather
- Airline Reservations
- Consumer Information
- Stock Quotations
- Technical Support
- Remote Databases
- Special Interest Groups
- Broadcast Faxing
- Corporate Data Systems

Authorized Reseller

$132.99

#1868720

Newton® MOBILE SALES MANAGER

THE NEWTON SOLUTION CARD

Includes four applications on a flash storage card with available storage card.

- Money Magazine Business Forms
- GeoassisTM
- NotionTM: The Newton List Manager
- Jigsaw Strategy Game

Authorized Reseller

$199

#1894909

Newton® 4MB FLASH STORAGE CARD

Use the 4MB Flash Storage Card to increase the storage capacity of your Newton MessagePad. Newton MessagePad lets you store up to 250 name cards(name, title, company, address, and three phone numberss), 200 notes of up to 50 characters, 500 calendar appointments, and 35 screens of uninterpreted text and drawings. This 4MB Flash Storage Card can store sixteen times as much information as your Newton MessagePad. The 1MB Storage Card can store four times as much information.

Authorized Reseller

$229

#1878572

Newton® 110 AC POWER ADAPTER

Lets you run your Apple® Newton® MessagePad™ using AC power.

Authorized Reseller

$29.99

#1902820

Newton® 110 CARRYING CASE

Now you can protect your Apple® Newton® from scratches and carry it in a stylish carrying case.

Authorized Reseller

$29.99

#1894987

Newton® CHARGE STATION 110

Desk Caddy allows user to use message pad while charging. Gives Quick Charge in two hours.

Authorized Reseller

$89.99

#1894943

Newton® CONNECTION KIT FOR WINDOWS™

contains everything you need-software, a cable, and a handbook-to connect your MessagePad communications assistant to your Windows software-based personal computer. You can view, edit, and back up your MessagePad information on your PC.

Authorized Reseller

$99.99

#1833380

Newton® CONNECTION KIT FOR MACINTOSH®

contains everything you need to connect to your Macintosh software based system.

Authorized Reseller

$99.99

#1894910

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

Prices Good Through September 13, 1994

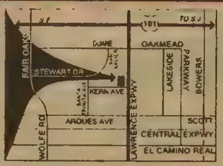
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #

SF
880
TO OAKLAND
280
TO SJ
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

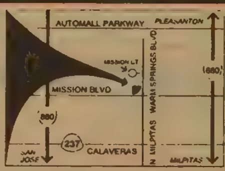
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800

SF
101
TO SJ
PAGE MILL RD
PORTAGE
LAMBERT
ASH
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont
440 Mission Ct.
(510) 770-FRYS
(510) 770-3700

VISA
MasterCard

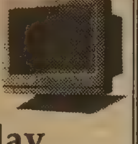
VISA AND MASTERCARD ACCEPTED

Macintosh Accessories

Authorized Reseller

Authorized Reseller

Apple® 17″ Color Multiple Scan Display



Multiple-scan technology allows you to adjust resolution • 17-inch screen Sony Trinitron tube Comes with a tilt-and-swivel base that allows you to position the monitor for optimal viewing comfort • Complies with the EPA's EnergyStar conservation guidelines • Adjustable resolution through software (included): Selectable from 640 by 480 pixels to 1024 by 768 pixels

Authorized Reseller

$999

#1925508

PowerPC™ Apple® Power Macintosh™ 6100/60 16/250 W/SoftWindows™

Keyboard and Monitor Sold Separately!

PowerPC™ 601 RISC processor; integrated math coprocessor60 megahertz speed • Apple SuperDrive® • Standard monitor port • Built-in LocalTalk® and high-speed Ethernet connections; AppleTalk® networking software • Power Macintosh™ will run DOS and Windows™ applications with SoftWindows™ by insignia Solutions

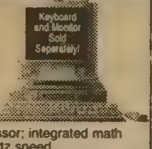
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

Authorized Reseller

$2499

#1897005

PowerPC™ Apple® Power Macintosh™ 6100/60AV 8/250 CD



PowerPC 601 RISC processor; integrated math coprocessor • 60 megahertz speed
8MB of RAM, 2MB of VRAM, built-in 1.44MB Apple SuperDrive® • 250MB Hard Drive • Internal CD-ROM drive • Two S-video to composite video adapters. • Integrated floating-point unit and 32K cache. • Power Macintosh™ will run DOS and Windows™ applications with SoftWindows™ by insignia Solutions

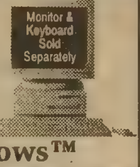
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

Authorized Reseller

$2499

#1896989

PowerPC™ Apple® Power Macintosh™ 7100/66 16/250 W/SoftWindows™



PowerPC™ 601 RISC processor; integrated math coprocessor • 66 megahertz speed • Internal expansion slots for three NuBus expansion cards • Two serial ports • SCSI port Built-in LocalTalk® and high-speed Ethernet connections AppleTalk® networking software • Power Macintosh™ will run DOS and Windows™ applications with SoftWindows™ by insignia Solutions.

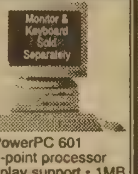
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from

Authorized Reseller

$3399

#1897049

PowerPC™ Apple® Power Macintosh™ 7100/66 AV 8/500 W/CD-ROM



Features include • 66MHz PowerPC 601 microprocessor with floating-point processor and 32K Cache • DRAM display support • 1MB of VRAM for second display support, expandable to 2MB • 2MB of VRAM for second display including NTSC or PAL monitors™. Power Macintosh™ will run DOS and Windows™ applications with SoftWindows™ by insignia Solution.

*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from

Authorized Reseller

$3699

#1897038

PowerPC™ Apple® Power Macintosh™ 8100/80 8/250 With/CD-ROM

Monitor & Keyboard Sold Separately

PowerPC 601 RISC processor; integrated math coprocessor and 256K memory cache • 80 megahertz speed • Internal expansion slots for three NuBus expansion cards • Built-in LocalTalk® and high-speed Ethernet connections; AppleTalk® networking software. Power Macintosh™ will run DOS and Windows™ applications with SoftWindows™ by insignia Solutions

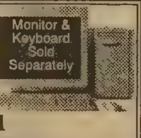
*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

Authorized Reseller

$3999

#1897094

PowerPC™ Apple® Power Macintosh™ 8100/80 AV 16/500 CD-ROM



PowerPC 601 RISC processor; integrated math coprocessor and 256K memory cache• 80 megahertz speed • 2MB VRAM • Expansion slots for three NuBus expansion cards • Video input/output port • GeoPort™ Telecommunication Capabilities • Built-in LocalTalk® and high-speed Ethernet connections; AppleTalk® networking software. • Power Macintosh™ will run DOS and Windows™ applications with SoftWindows™ by insignia Solutions

*Power PC™ is a Trademark of International Business Machines Corporation used under liscense there from.

Authorized Reseller

$5299

#1897119

Apple® Macintosh® 14″ Color Display

The Macintosh® Color Display offers all of these benefits—and sets new standards for performance. With this display you'll see right away that lines are perfectly straight. Edges are sharp. Colors are pure and uniform. And image definition is crystal clear over the entire area of the screen, even in your finely detailed drawings.

Authorized Reseller

$299

#1849080

Apple® 14″ Color Macintosh® Display with Trinitron Tube

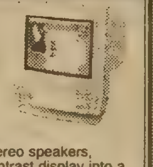
The new Apple® Color Display provides the high quality and practical ergonomic design you expect from Apple®. And its enhanced electronics allow this 14" monitor to display full-color images with photographic quality. The display's low, stable center of gravity keeps it from being easily tipped over, and its built-in tilt-and-swivel base make adjustment easy.

Authorized Reseller

$399

#1738513

Apple® AudioVision™ Display



AudioVision™ 14 Display integrates high-quality stereo speakers, microphone, and high-contrast display into a single, sleek package. Speakers deliver CD-Quality sound. Display Quality:

- 14-inch screen, 640 horizontal pixels by 480 vertical lines (at 70 dots per inch).
- Trinitron color picture tube with improved electronics for higher brightness, high contrast and uniform contrast

Authorized Reseller

$649

#1820421

EDMARK. KID DESK

Kid Desk gives kids creative control over their computing environment. It protects hard disk data from a child's curiosity while enabling even young children to launch their own software programs and learn real-life skills.

$25.95

MAC
#1742392

ELECTRONIC ARTS® PGA TOUR GOLF

Experience the thrill and challenge of PGA Tour Golf. Includes dynamic wind conditions, 10 different ball lies, random pin placement, accurate ball physics, and a variety of special shots.

$39.95

MAC
#1920802

GRYPHON COLORFORMS

Computer Fun Set

Colorforms® Computer Fun Set was designed with every child's interest in mind! While some children enjoy a farm setting others may prefer basic shapes. There are 27 different stick-ons™ included in each of the themed modules!

$39.95

#1905786

GOLD DISK ASTOUND FOR MAC

Produce overheads, slides, notes and handouts with more options and greater flexibility. • Add animation, sound and even digital video by pointing, clicking and dragging. • Import and edit files created by other presentation packages.

$169.95

MAC
#1902668

CLARIS® FILEMAKER PRO 2.1

COMPTETITIVE UPGRADE

CLARIS
SPECIAL TRADE UP PACKAGE!
FileMaker Pro

If you currently own any database software, now is the time to upgrade to the best database software for the Mac.

$124.95

MAC
#1920695

ALDUS PAINT AND PUBLISH

PAINT & PUBLISH

Paint and Publish is an incredible bundle of two great products, Aldus Superpaint 3.5 and Aldus Home Publisher 2.0 for Mac. You can also do charts and graphics for presentations and publish newsletters, fliers, labels and calendars.

$89.95

#1931792

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

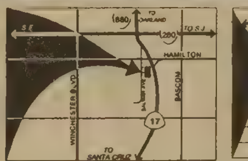
Fry's ELECTRONICS

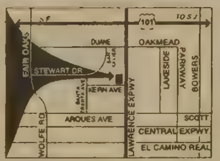
Prices Good Through September 13, 1994

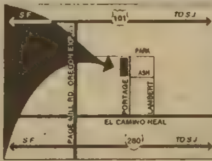
Limit Rights Reserved. Not Responsible for Typographical Errors.

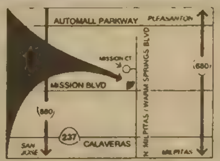
STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #









Campbell	**Sunnyvale**	**Palo Alto**	**Fremont**
600 E. Hamilton Ave.	1177 Kern Ave.	340 Portage Road	440 Mission Ct.
(408) 364-3700	(408) 733-1770	(415) 496-6000	(510) 770-FRYS (3797)
(408) 364-3595	(408) 735-6800	(415) 496-6044	(510) 770-3700

VISA

MasterCard

VISA AND MASTERCARD ACCEPTED

Macintosh Accessories

Authorized Reseller

Authorized Reseller

Prometheus ProModem® 144e

EXTERNAL 14,400 BPS DATA/FAX MODEM FOR THE MACINTOSH INCLUDES MAXFAX™ SOFTWARE FROM PROMETHEUS.

ProModem 144e incorporates the sophistication of V.32bis for a line speed of 14,400 bps and V.42bis for up to 57,600 bps throughput. Automatic error correction and data compression.

$119

#1932922

Sonic Systems Macintosh® Networking AAUI TWP Transceiver

$49.99

#1889680

Farallon

Hook Up With the World's #1 Macintosh Connector

Putting together a network with PhoneNET® is a Snap.

- Gold-plated contacts
- Surge Suppression (ESD) tested to 15,000 volts surge suppression
- Contains 3 mini DIN-8 connectors

3 PACK!

$39.99

PN 303

#1888069

Farallon

EtherWave Transceivers

- 10BASE-T Compatible
- Connects up to 8 nodes on a single segment
- Supports up to 100-meter segment lengths
- Self-terminating
- Automatic crossover
- Lifetime warranty

$119

#1896266

Apple® LaserWriter Select® 310

The Apple® LaserWriter Select® 310 is the most affordable PostScript™ laser printer ever to come from Apple®, and is designed for personal use by both Macintosh® and Windows computer users. You'll appreciate the printer's speed. And with PostScript™ printing, you'll also get high-quality results and compatibility with all the major application programs.

$699

#1767784

HEWLETT PACKARD Authorized Dealer

DeskJet 1200C For Mac & DOS

- 600 x 300dpi black text at up to 7 pages per minute.
- 300dpi color at 1 to 2 minutes per page creates fast, high-quality output with bold, brilliant colors and true black.
- Plain-paper printing for both black and color.
- Both Macintosh and DOS environment.

$2289

#1786985

CITIZEN

Notebook Printer II For Mac

The new Citizen Notebook Printer II, offers ultra-convenient laser quality printing, a built-in five page sheet feeder (30 page optional sold separately), special image 360 dpi high definition output at two pages per minute.

$299.99

#1871298

Apple® StyleWriter® II Printer

The Apple® StyleWriter® II printer, laser-quality printing at an affordable price.

- 360 dots per inch quality
- Multipurpose tray holds up to 100 sheets of paper and 15 envelopes
- Comes with 39 scalable TrueType™ fonts
- Greyshare™ driver software for gray-scale printing
- All Macintosh® products are designed to work together

$267

#1758221

ENHANCE LIBERTY ADAPTER

The Liberty Adapter was created as a bridge between your Apple® Computer and a PC Monitor Features Include:

- Easy to use selector dial
- Sync switching for computers that only output external sync.
- Quick reference label on back of adapter
- Tested for complete compatibility with all Apple® Computers
- Successfully tested by all major monitor manufacturers.

$39.99

#1898763

TOSHIBA

MULTIPLE FREQUENCY FLAT SCREEN 17" COLOR MONITOR

Resolution selectable from VGA to 1024 x 768, with high resolution graphics. DAC (Dynamic Astigmatism Control) focus system with .31mm dot pitch and Invar Mask.

$599

#1874958

Apple® QuickTake™ 100

High image resolution - 640 by 480 • Standard image resolution - 320 by 240 pixels • 24-bit color resolution • 1MB of Flash EPROM stores up to 32 images for over one year • 1/30 to 1/75 seconds shutter speed, self-timer - 10 seconds automatic • ƒ2.8 to ƒ16 automatic aperture range • Focus range of four feet to infinity Built-in automatic or manual flash - range from 4 feet to 9 feet

$699

#1897164

Brøderbund KID CUTS

Fantastic arts and crafts for kids! Teaches drawing and printing, reading and writing, and it's a fun filled process for all ages.

$26.95

MAC

#1814215

The Learning Company

Reader Rabbit 2

Reader Rabbit 2 is designed to motivate first and second grade level children to read on their own as they build a foundation for successful reading.

It helps children with:

Word Building,

Vowel Sounds,

Word Concepts,

Early Dictionary Skills

$38.95

MAC

#1747386

VEGAS GAMES FOR MAC

Vegas games entertainment package for Macintosh brings the Multi-player aspect of true casino games to your computer wherever and whenever you want. It comes with five complete games:

- Craps
- Poker
- Baccarat
- Blackjack
- Horse Racing

$19.95

MAC

#1902004

Microsoft® FoxPro® Version 2.5 for Macintosh®

combines exceptionally easy-to-use tools with blazing speed and amazing power. Flexible, advanced tools provide easy access to data for users and raw power for developers.

$95.95

MAC

#1890097

ALDUS PAGEMAKER 5.0 UPGRADE FOR MAC

Aldus Pagemaker is the undisputed leader in professional publishing software. Its intuitive features and interactive controls let you manage every phase of a project with unparallelled precision from writing to layout, creating the professional results you need.

$144.95

MAC

#1931781

FRACTAL DESIGN DABBLER

is like an art school inside your computer. Its tools and textures are just like the traditional tools and textures you are using. Crayons and sound effects add to the fun of the program.

$69.95

MAC

#1931183

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

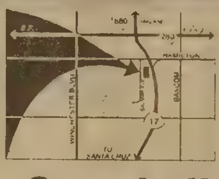
Fry's ELECTRONICS

Prices Good Through September 13, 1994

Limit Rights Reserved. Not Responsible for Typographical Errors.

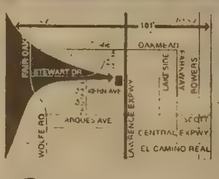
STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #



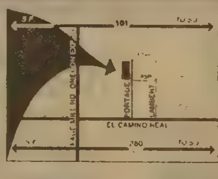
Campbell

600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



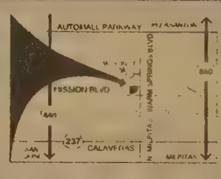
Sunnyvale

1177 Kern Ave.
(408) 733-1770
(408) 735-6800



Palo Alto

340 Portage Road
(415) 496-6000
(415) 496-6044



Fremont

440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA

MasterCard

VISA AND MASTERCARD ACCEPTED

EPSON®

WHEN YOU'VE GOT AN EPSON
YOU'VE GOT A LOT OF COMPANY

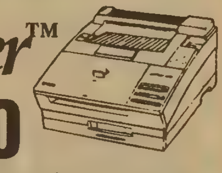
EPSON® STYLUS 800 INK JET PRINTER

360 X 360 dpi "Laser-Sharp" printing
ESC/P2 with 4 Scalable Fonts
Whisper Quiet and Fast
7 built-in typefaces
Windows Compatible
2 Year Warranty

$249.99

#1782785

EPSON® Action Laser™ 1500

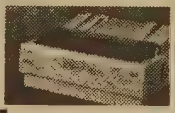


- Fast six pages per minute print speed.
- HP LaserJet III and Epson dot matrix compatible
- 27 resident fonts, 13 scalable
- 1MB memory expandable to 5MB
- 300 dpi resolution w/RIT
- Built-in parallel & serial interface
- 2-year limited warranty

$678

#1798706

EPSON® LQ-570 PLUS 24 PIN PRINTER



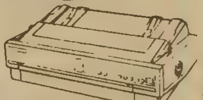
WITH SCALABLE FONTS!

- 80 Column • 269 CPS Draft Mode
- 112 CPS Letter Quality
- Four Scalable Fonts
- 360 dpi with Optional Film Ribbon

$248

#1612004

EPSON® LQ-1070 PLUS 24-PIN PRINTER



136 Column • 11 Fonts
2 Scalable Fonts • 252 CPS Draft Mode 84 CPS NLQ Mode

$398

#1821927

Everyone's Going digital

digital DECwriter 65 Color Dot Matrix Printer

- 24-wire color dot matrix printer
- Printer speed up to to 2.8 pages per minute (260x360 dpi)
- Built-in 50-page sheet feeder
- High quality color for home or office
- Two Year Warranty

$199.99

#1907342

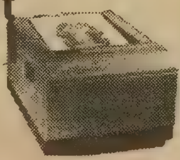
digital DECcolorwriter 520ic Color Inkjet Printer

- High Performance Color Inkjet Printer
- Print speed up to 5 pages per minute
- Built-in 150 page sheet feeder
- Prints on plain paper, transparencies, labels and envelopes
- MS Windows driver included
- 2 Year Warranty

$399.99

#1907272

digital DEC Laser 1152 PostScript Level 2 Laser Printer



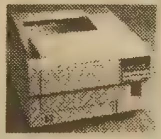
- 300 X 300 dots per inch • Printer speed up to to 4 pages per minute
- Paper Types: Cutsheet, labels, transparencies and envelopes
- 2MB memory upgradable to 4MB
- 17 Adobe PostScript fonts, upgradable to 43 fonts.
- Serial/Parallel/AppleTalk Interfaces

IBM AND MAC READY!

$699

#1907227

digital DEClaser 5100 PostScript Level 2 Laser Printer



- 600 X 600 dots per inch
- Printer speed up to to 8 pages per minute
- Adobe Level 2 PostScript with 73 Adobe fonts
- 2MB memory upgradable to 66MB
- Serial, Parallel and AppleTalk interfaces
- Built-In 250-page sheet feeder

IBM AND MAC READY!

$1499

#1907319

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

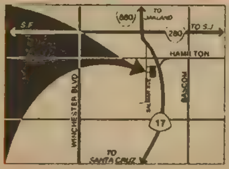
Fry's ELECTRONICS

Prices Good Through September 13, 1994

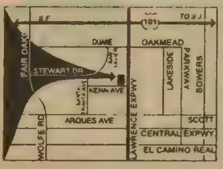
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

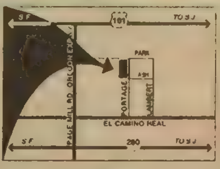
CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

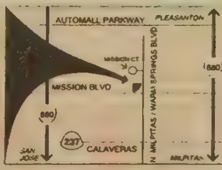
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


S.F.
101
TO S.J.
PARK
PAGE MILL RD
OREGON EXPY
PORTAGE
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
680
880
237
CALAVERAS
SAN JOSE
N. MILPITAS / WARM SPRINGS BLVD
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA

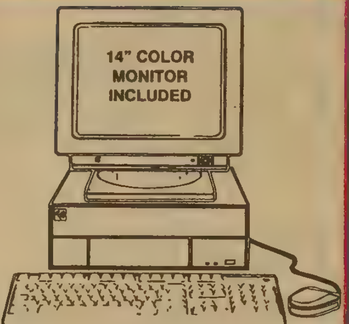
MasterCard

Visa and MasterCard Accepted

FRY'S Will Beat Any IBM Price In Town!

IBM®

486SX 25MHz


14" COLOR
MONITOR
INCLUDED

COLOR SYSTEM

Intel 486SX 25MHz CPU • 80MB Hard Drive
2MB Memory • 3.5" 1.44MB/5.25" 1.2MB Floppy Drives IBM Mouse • Modem
14" Color Monitor Pre-loaded Software: DOS 6.0 • Windows 3.1
Works for Windows • Prodigy
2133-M40

$799

#1927337

IBM® PS/1® with Rapid Resume.

IBM®

2133-21C

intel inside

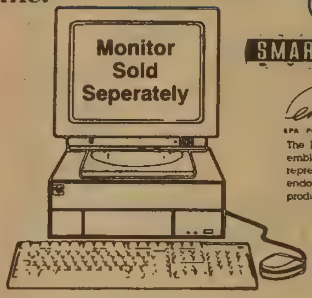
SMART ENERGY

energy

EPA POLLUTION PREVENTER

The Energy Star emblem does not represent EPA endorsement of any product of service

486SX2 50MHz


Monitor
Sold
Seperately

Intel 486SX2 50MHz CPU • 253MB Hard Drive • 4MB Memory Expandable to 64MB
3.5" 1.44MB & 5.25" 1.22MB Floppy Drives • Local Bus SVGA • IBM Mouse IBM Keyboard • Internal Modem
Preloaded Software: MS DOS Microsoft Windows • Microsoft Works for Windows • PRODIGY • P/S1 Tutorial, Index Fitness, • Virus check• PS/1 Edition American On-line IBM Quality & Reliability: The PS/1 Expert is built to IBM's exacting standards for quality & reliability. Support and Service: The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day 365 days a year.
Monitor Sold Seperately.

$999

**IBM and Personal System/1 are registered trademarks of International Business Machines Corporation.*

Model 2133-21C
#1925988

IBM®

IBM® PS/1® with Rapid Resume.

2168-57C

intel inside

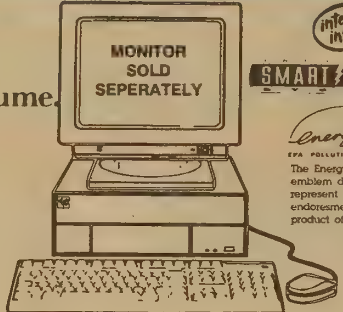
SMART ENERGY

energy

EPA POLLUTION PREVENTER

The Energy Star emblem does not represent EPA endorsement of any product of service.

486DX2 66MHz


MONITOR
SOLD
SEPERATELY

Intel 486DX2 66MHz CPU • 720MB Hard Drive • 8MB Memory Expandable to 64MB
8K Cache expandable to 256K • 3.5" 1.44MB/5.25" 1.2MB Floppy Drives • 6 x 8 M.T. Slots • Local Bus SVGA\
IBM Mouse • IBM Keyboard FAX/Modem • Novell® certified Preloaded Software: MS DOS 6.0
Microsoft Windows 3.1 Microsoft Works for Windows • PRODIGY • P/S1 Tutorial, Index Fitness
PS/1 Edition American On-line IBM Quality & Reliability: The PS/1 Expert is built to IBM's exacting standards for quality & reliability. Support and Service: The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day,
365 days a year.
Monitor Sold Seperately.

$1999

**IBM and Personal System/1 are registered trademarks of International Business Machines Corporation.*

Model 2168-57C
#1902613

IBM®

SMART ENERGY

energy

…UTION PREVENTER

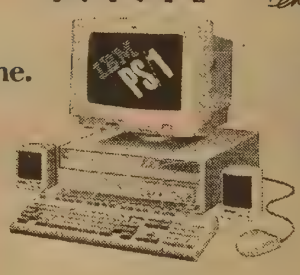
…ergy Star
…n does not
…nt EPA
…sment of any
…t of service

IBM® PS/1® with Rapid Resume.

2155-87C Multi-Media System

intel inside

486DX2 50MHz



Intel 486DX2 50MHz CPU • 420MB Hard Drive • 4MB Memory Expandable to 64MB
3.5" 1.44MB & 5.25" 1.22MB Floppy Drives • Local Bus SVGA • IBM Mouse • IBM Keyboard
Internal FAX/Modem • 5 AT Slots Preloaded Software: MS DOS • Microsoft Windows
Microsoft Works for Windows • PRODIGY • P/S1 Tutorial, Index, Fitness, Virus check
PS/1 Edition American On-line IBM Quality & Reliability: The PS/1 Expert is built to IBM's exacting standards for quality & reliability. Support and Service: The exclusive online PS/1 Club™ answers your computing questions, 24 hours a day, 365 days a year.
Monitor Sold Seperately.

$1699

**IBM and Personal System/1 are registered trademarks of International Business Machines Corporation.*

Model 2155-87C
#1902624

WE GUARANTEE IT!

Fry's ELECTRONICS

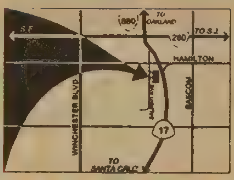
Home of Fast, Friendly, Courteous Service

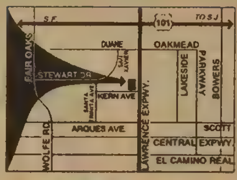
Prices Good Through September 13, 1994

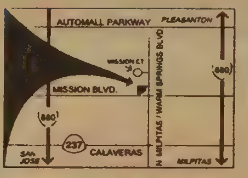
Limit Rights Reserved
Not Responsible For
Typographical Errors

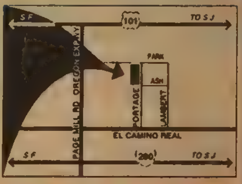
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA **VISA AND MASTERCARD ACCEPTED** MasterCard


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ


S.F.
101
TO S.J.
FAIR OAKS
DUANE
SAN XAVIER
OAKMEAD
STEWART DR
LAKESIDE
PARKWAY
BOWERS
SANTA TRINITA AVE
KERN AVE
LAWRENCE EXPWY.
WOLFE RD
ARQUES AVE
SCOTT
CENTRAL EXPWY.
EL CAMINO REAL

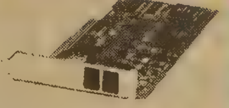

AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD.
N MILPITAS / WARM SPRINGS BLVD
880
680
237
CALAVERAS
SAN JOSE
MILPITAS


S F
101
TO S J
PAGE MILL RD OREGON EXPWY
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
S F
280
TO S J

	CAMPBELL	SUNNYVALE	FREMONT	PALO ALTO
	600 E Hamilton Ave.	1177 Kern Ave.	440 Mission Ct.	340 Portage Ave.
	(408) 364-3700	(408) 733-1770	(510) 770-FRYS(3797)	(415) 496-6000
CORPORATE P.O. FAX #'s	(408) 364-3595	(408) 735-6800	(510) 770-3700	(415) 496-6044

MODEMS

INTERNAL DATA/FAX MODEM
DATA PORT™ 14,400 BPS



All-in-one high-speed V.32bis Fax/Modem

Delivers the highest performance, reliability, and compatibility in the industry. Tested and proven to be the leader in connecting calls, even on noisy, impaired lines.

The DataPort 14.4/Fax Modem delivers data at line speeds up to 14,400 bps. That's fast! But combined with its advanced, optically-coupled phone line interface and V.42bis data compression and error correction, you gain effective data throughput of up to 57,600 bps—nearly 24 times faster than 2,400 bps modems—on "real world" phone lines! This high performance significantly saves long distance costs.

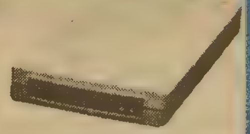
The DataPort 14.4/Fax Modem expands your personal computer into a fax workstation. You can send and receive faxes without ever waiting in line; and send presentation-quality faxes!

#1751420

AT&T

\$129^{95}

EXTERNAL DATA/FAX MODEM
DATA PORT™ 14,400 BPS



All-in-one high-speed V.32bis Fax/Modem

Delivers the highest performance, reliability, and compatibility in the industry. Tested and proven to be the leader in connecting calls, even on noisy, impaired lines.

The DataPort 14.4/Fax Modem delivers data at line speeds up to 14,400 bps. That's fast! But combined with its advanced, optically-coupled phone line interface and V.42bis data compression and error correction, you gain effective data throughput of up to 57,600 bps—nearly 24 times faster than 2,400 bps modems—on "real world" phone lines! This high performance significantly saves long distance costs.

The DataPort 14.4/Fax Modem expands your personal computer into a fax workstation. You can send and receive faxes without ever waiting in line; and send presentation-quality faxes!

#1751419

AT&T

\$149^{99}

SIIG 14/4 FAX/MODEM

Fax Modem
BOARD

- GROUP 3 Compatible
- 16550 UART
- BITCOM and BITFAX S/W
- Supports up to Com 7 and IRQ-9
- 5 Year Warranty

#1930078

SIIG, Inc.

\$79^{99}

TyIN2000™

DATA FAX/MODEM

- Up to 9600bps with v.42bis over 2400bps data transmision.
- Data compression with v.42bis and MNP2-4.
- Hayes compatible.

ANSWERING MACHINE

- Unlimited mail boxes and messages (limited only by available disk space).
- Digital voice compression.
- Full call progress and message monitoring
- Remote message retrieval
- Fax-and-touch-tone detection in parallel with outgoing message.
- Time/dating stamping.
- Memo recording.

#1743887

National Semiconductor

\$89^{99}

COMMUNICATOR GOLD
INTERNAL 14,400 BAUD FAX/MODEM WITH VOICE MAIL

CompleteCommunicator Gold
14400bps
MODEM
FAX
VOICE

- MNP5 and V.42 bis
- Data thtoughput up to 57,600bps
- Group III Fax w/16550 UART
- 1000 password protected mailboxes

#1906422

TheComplete PC

\$159^{99}

USRobotics
The Intelligent Choice in Data Communications

WORLDPORT
14,400 BPS
FAX/DATA PCMCIA 2.0 MODEM

- 14,400 BPS Data and Fax
- V.42/MNP 2-4 Error Control
- V.42 bis Data Compression Achieves Throughput up to 57,600 bps

#1871542

\$259^{99}

KEEP IN TOUCH CARD
PCMCIA 14,400 BPS
DATA AND FAX/MODEM

- High-speed send and receive fax capabilities that support Group 3, Class 1 and Class 2 with up to 14,400 bps transmission speeds.
- CCIT V.32 bis modulation, V.42bis data terminal equipment (DTE) rates up to 57,600 bps.

#1889211

AT&T

\$274^{95}

USRobotics
The Intelligent Choice in Data Communications

Courier Terbo
19,200 BPS
EXTERNAL FAX/MODEM

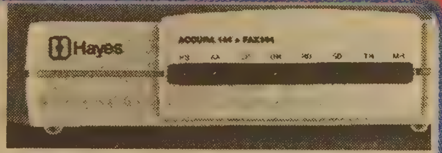
- Dial Back
- V.32
- V.42
- With ASL up to 57,600BPS

#1639030

\$389^{99}

Hayes®

ACCURA
EXTERNAL 14,400 FAX/MODEM


Hayes
ACCURA 144 + FAX144

- Free SmartCom Data and Fax Software
- Group 3 Fax
- V.42, V.42bis, MNP 2-5
- Cables included

08-01174
#1798201

\$149^{99}

Hayes®

ACCURA INTERNAL
14,400 BAUD FAX/MODEM

Free SmartCom Data and Fax Software • Group 3 Fax
V.42, V.42bis, MNP 2-5 • Cables included
08-01185
#1798197

\$139^{99}

Fry's ELECTRONICS

Home of Fast, Friendly, Courteous Service

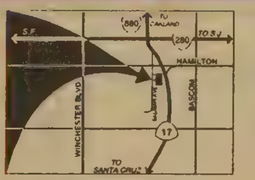
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

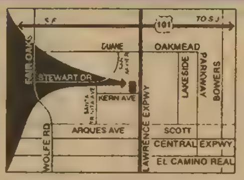
STORE HOURS:
MON-FRI
9AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

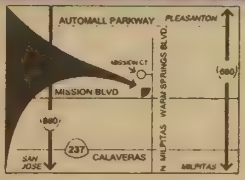
CORPORATE P.O. FAX #'s


S.F.
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

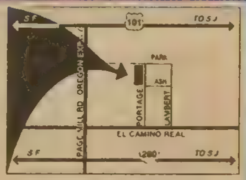
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S J
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
LAWRENCE EXPWY
ARQUES AVE
SCOTT
CENTRAL EXPWY
WOLFE RD
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD.
N MILPITAS
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S F
101
TO S J
OREGON EXP
PAGE MILL RD
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
S F
280
TO S J

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

MODEMS

PRACTICAL PERIPHERALS®

PROUDLY MADE IN THE U.S.A.

FaxMe

Introducing the plug-in cartridge that turns an HP LaserJet printer into a plain paper receive FAX machine.

It is compatible with all Group III fax machines and will receive at 9,600, 4,800, or 2400 BPS. FaxMe runs without software and without a computer. Lifetime Warranty.

#1741771

$69

14,400 BPS INTERNAL FAX/MODEM

Magnum 144 Internal Fax Modem

- Group 3 • Class 1 and 2
- V.42, V.42 BIS, MNP5
- Quick Link DOS/Windows Software

#1909252

$69.99

PROMETHEUS EXTERNAL 14,400 BAUD FAX/MODEM

ProModem 144e

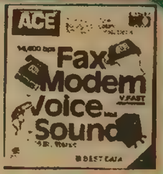
for Windows and DOS

Includes MaxFax Software from Prometheus

#1843660

$89.99

BEST DATA ACE 14/4 FAX/MODEM VOICE MAIL/SOUND


ACE
Fax Modem Voice Sound

THE ALL IN ONE BOARD FOR SOUND AND COMUNICATIONS

- V.Fast Upgrageable
- 16-Bit Stereo
- DSP Software Upgradeable

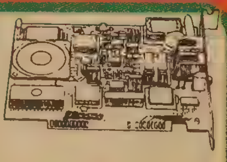
#1871782

$229.99

PRACTICAL PERIPHERALS®

PROUDLY MADE IN THE U.S.A.

14,400 BAUD INTERNAL FAX/MODEM



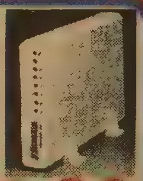
Super High Speed V.32 BIS Protocol
Quick Link II Communication Software
PM14400FX
#1667912

$119.99

PRACTICAL PERIPHERALS®

PROUDLY MADE IN THE U.S.A.

14,400 BPS EXTERNAL FAX/MODEM

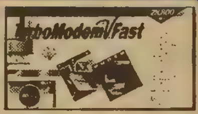


V.32, V.42 BIS MINI TOWER MODEM 14,400 DATA AND FAX
QUICK LINK II SOFTWARE
LIFETIME WARRANTY
#1757781

$139.99

TheComplete PC *TurboModemV.Fast™*

External 28,800 BPS Modem 14,400 BPS Fax


TurboModemVFast

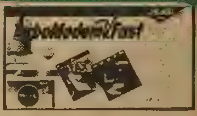
- V.32 bis, V.42 bis, MNP5
- DOS and Windows Software
- Cables

#1906444

$218

TheComplete PC *TurboModemV.Fast™*

Internal 28,800 BPS Modem 14,400 BPS Fax


TurboModemVFast

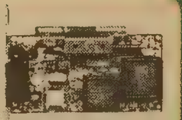
- V.32 bis, V.42 bis, MNP5
- DOS and Windows Software
- Cable Included

#1906433

$178

ZOOM

28.8 BPS INTERNAL FAX/MODEM



- Handshaking at 28.8 bps takes only 6 seconds
- v.42bis, V.42, V.17 Protocols • MNP 5
- Supports Class 1 and 2
- Auto-negotiation
- Buffered 16550 UART to prevent overruns

#1871645

$159.99

MACRONIX STEALTH

28.8 BPS INTERNAL FAX/MODEM

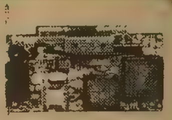
- Up to 115,200bps w/compression
- V.42bis MNP-5; V.Fast Class
- WinFax Lite DOSFax Lite
- ComIT for Windows and ComIT for DOS

#1919509

$189

ZOOM

INTERNAL 14,400 BPS FAX 24,000 BPS MODEM



- V. Fast Class
- VFP 24K
- Windows Fax Software

#1871597

$109.99

Fry's ELECTRONICS

Home of Fast, Friendly, Courteous Service

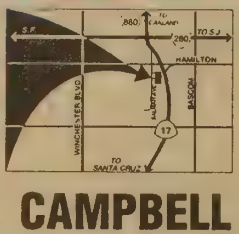
STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

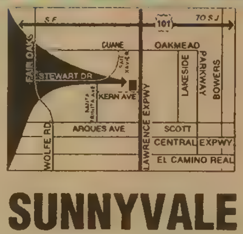
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

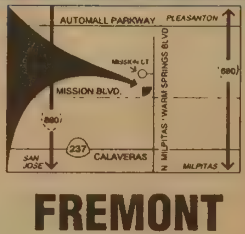
CORPORATE P.O. FAX #'s


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

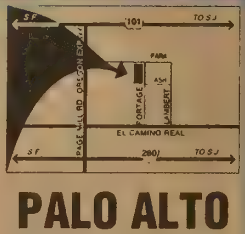
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
WOLFE RD

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD.
880
680
N MILPITAS · WARM SPRINGS BLVD
237
CALAVERAS
SAN JOSE
MILPITAS

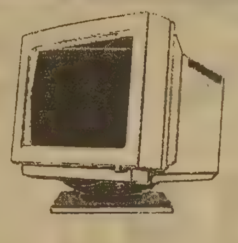
FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S.F.
101
TO S.J.
PAGE MILL RD · OREGON EXPWY
PARK
PORTAGE
ASH
LAMBERT
EL CAMINO REAL
280
TO S.J.

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

MONITORS

NEC



1024 X 768
NON-INTERLACED
14" SVGA MONITOR

1024 X 768 • Non-Interlaced
Non-Glare • Low ELF & VLF
110/220 Volt

$299

#1813867

NEC

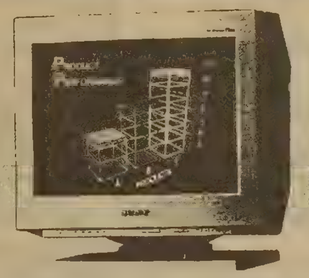
5FGE
1024X768
17" SUPER VGA
ANALOG MONITOR

1024 X 768 • Analog
5FGE

$969

#1788105

SONY.



1600 x 1200
17" GDM-17SE1
MONITOR

17" 1600 X 1200 RESOLUTION
.25 PITCH; FLAT SCREEN
DIGITAL CONTROL

$999

#1852983

SONY.

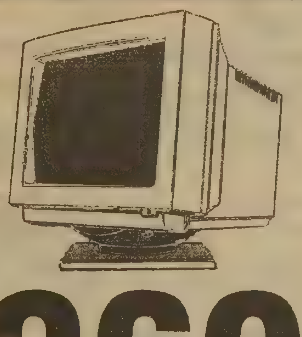
CDP-15FS
1280 x 1024
15" SUPER
VGA MONITOR

15" 1280 X 1024 Resolution
Flat Trinitron Screen
Energy Star Compliant

$448

#1928095

SAMPO
AMERICA



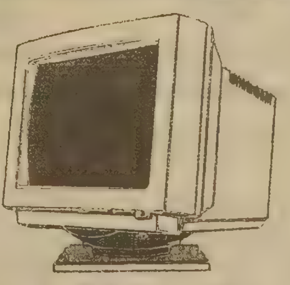
1280 X 1024
NON-INTERLACED
15" SUPER
VGA MONITOR

1024 X 768 • Non-Interlaced
Flat Screen • INVAR Shadow Mask
76HZ Refresh VESA
15" Large Screen
SAMPO KDM-1566

$369

#1691742

HITACHI



SuperScan™ 15s

- 15" SVGA, Non-interlaced
- 1280 x 1024, 28mm Dot Pitch
- Flat Screen
- Micropressor Control
- 30-66 KHz
- Hi-Refresh

$439

#1939376

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

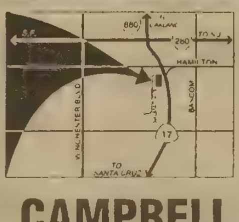
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

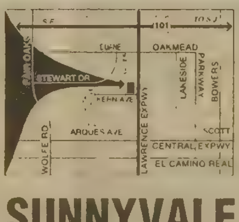
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

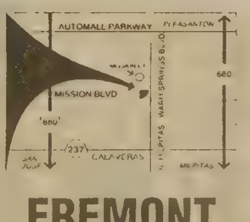
CORPORATE P.O. FAX #'s


S.F.
880
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
STEWART DR
KERN AVE
OAKMEAD
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700

S.F.
101
TO S.J.
PAGE MILL RD
OREGON EXP
PORTAGE
LAMBERT
EL CAMINO REAL
280

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

COMPUTER ACCESSORIES FOR MACINTOSH

Apple® Color OneScanner™

The colorful, easy to use scanning solution.

- Includes powerful image-editing tools for touch-up, rotation and scaling.
- Ofoto 2.0 adds color support, background processing and improved user interface
- Easy to use with any Macintosh
- All Macintosh products are designed to work together.

#1756872

Authorized Reseller

$999

UMAX 300 x 600 DPI COLOR SCANNER FOR MACINTOSH

A basic scanning solutionUC630 LE is a great tool for creating presentation materials, newsletters, brochures, flyers, invitations, and more. This comprehensive Package features award winning UMAX 630 300 x 600 dpi color scanner, Adobe Photoshop LE and Apple PhotoFlash for Macintosh.
#1795426

$649

Interex® Computer Products TWO BUTTON MOUSE FOR MAC

- Ergonomically designed
- Optical-mechanical encoding for precision tracking.
- Works with Apple Macintosh, PowerBook, Performa, Centris and other ADB compatible models.
- Two button design with "Click and Drag Lock"

#1884607

$19.99

Interex® Computer Products 105-KEY KEYBOARD FOR MAC

with Wave Design
#1869215

$69.99

MAC & FAX® 14,400 BAUD POCKET FAX/MODEM

USRobotics®
The Intelligent Choice in Data Communications

Send and receive Group III fax transmissions. Supports data speeds from 300 to 14,400 and fax speeds from 2400 to 14,400. Fully CCITT V.32 bis and CCITT V.29 compatible. Includes V.42/MNP 2-4 error control and V.42 bis/ MNP 5 data compression for thoughput of up to 57,600 bps.
#1833841

$249.99

1.2 GIGABYTE EXTERNAL HARD DRIVE FOR MAC

MODEL 1.2
#1850682

NU DESIGN

$799

85MB EXTERNAL HARD DRIVE FOR MAC

Retail Pack Macintosh With Cable, Terminator and FWB Software
MODEL 85
#1838547

NU DESIGN

$249

AppleCD™ 300 External

The AppleCD™ 300™ drive allows you to access text, graphics, and sound stored on CD-ROM discs. It's a cost-effective tool for easily accessing the thousands of volumes of information stored on CD-ROM discs. Data transfer rate 300K per second 256K Buffer • Data access time 259ms
Two 50 PIN SCSI connectors • 2 RCA Jacks
Headphone Jack • Reads Multi-session Kodak Photo CD Disk
#1756850

Authorized Reseller

$369.99

AppleCD™ 300 Internal

The new high performance AppleCD™ 300 drive is the perfect tool for accessing the world of CD-ROM and multimedia.

- Operates at twice the speed of ordinary CD-ROM drives
- Double-speed (300 KB/sec) data transfer rate
- Average access time of 295 ms (in double-speed mode)
- 256 KB buffer for faster data transfer
- Kodak photo CD ready
- Plays standard audio CDs
- CD digital audio data via SCSI

#1834439

Authorized Reseller

$249

256MB MAGNETO-OPTICAL DRIVE FOR MAC

- One Formatted 256MB Cartridge • Mac System Cable
- FWB Hard Disk Toolkit PE • External Termination
- Zero-footprint Case Compliments Any Macintosh System

#1891087

NU DESIGN

$999

2.1 GIGABYTE DAT TAPE DRIVE FOR MAC

- One 120 Meter DAT Tape • Mac System Cable
- External Termination • Retrospect Back-Up Software
- Zero-footprint case compliments any Macintosh System

#1891076

NU DESIGN

$999

EXTERNAL CD-ROM FOR MAC

NEC CDR210 • 300ms • 64K Buffer
Kodak Photo CD Compatible • Dual Speed
#1886171

NU DESIGN

$299

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

Prices Good Through September 13, 1994

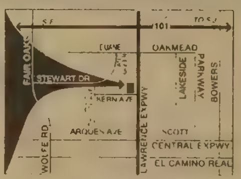
Limit Rights Reserved
Not Responsible For
Typographical Errors

STORE HOURS:
MON-FRI 8AM-9PM
SATURDAY 9AM-8PM
SUNDAY 9AM-7PM

VISA AND MASTERCARD ACCEPTED
CORPORATE P.O. FAX #'s

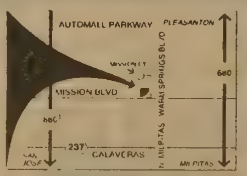
S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595



S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
WOLFE RD
LAWRENCE EXPWY
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700

S.F.
101
TO S.J.
PAGE MILL RD
OREGON EXPWY
PORTAGE
LAMBERT
EL CAMINO REAL
280
TO S.J.

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

HARD DRIVES

Seagate

130MB 3.5" IDE HARD DRIVE

3.5" x 1" HT • 16MS Average Access
ST3145A #1660878

$179

SAMSUNG

213MB 3.5" IDE HARD DRIVE

3.5" IDE Hard Drive 1" Ht.
13ms Average Access Time
SHD3211A
#1936247

$169

Maxtor

131MB 3.5" IDE HARD DRIVE

3.5" X 1" HT • 15MS Access Time
7131A #1803646

$179^{95}

SAMSUNG
Electronics American, Inc

250MB 3.5" IDE HARD DRIVE

3.5" Form Factor 1" Ht.
SHD3122A #1786011

$189^{95}

CONNER

210MB 3.5" IDE HARD DRIVE

14ms Access • IDE Interface
1" Ht. • 32K Buffer
Two Year Warranty
CFS210A #1888575

$169

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

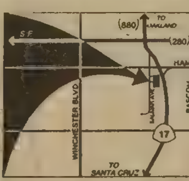
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

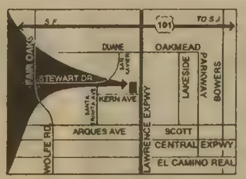
VISA AND MASTERCARD ACCEPTED

CORPORATE P.O. FAX #'s



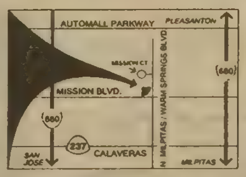
S F
(880)
TO OAKLAND
(280)
TO S J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595



S F
101
TO S J
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
WOLFE RD
LAWRENCE EXPWY

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
(680)
MISSION BLVD.
N MILPITAS / WARM SPRINGS BLVD
(880)
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700

S F
101
S J
PARK
ASH
PORTAGE
LAMBERT
PAGE MILL RD OREGON EXP
EL CAMINO REAL
280
TO S J

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

HARD DRIVES

SAMSUNG
355MB IDE HARD DRIVE

355MB IDE HARD DRIVE
3.5" X 1" HT.
13 MSEC;
SHD-3172A
#1880315

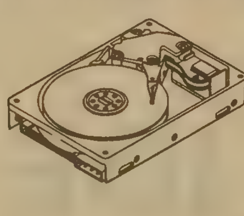
$188

CONNER
340MB 3.5" IDE HARD DRIVE

13msec Access
3.5"
CP30344
#1825736

$199

Maxtor
340MB IDE HARD DRIVE



1" HT.
15ms Access Time
345MB
Formatted Capacity
7345A #1781762

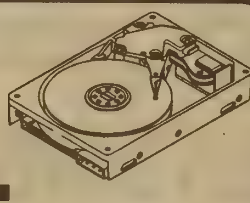
$199

Seagate
ST-3390A
340MB IDE HARD DRIVE

1"HT • 12MS Access
256K Cache
Bulk Pack
#1836246

$229

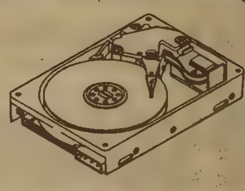
CONNER
540MB IDE HARD DRIVE



3.5" X 1"HT.
12msec Access
CFA540A
#1802210

$299

Maxtor
546MB IDE HARD DRIVE



3.5" X 1"HT.
12msec Access
256K Cache
7456A
#1912395

$279

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

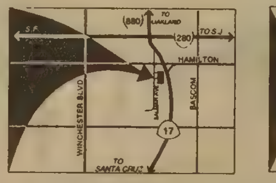
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

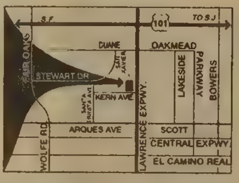
VISA AND MASTERCARD ACCEPTED

CORPORATE P.O. FAX #'s



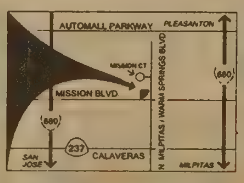
S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595



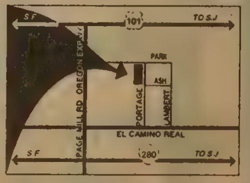
S.F.
101
TO S.J.
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY.
LAWRENCE EXPWY.
EL CAMINO REAL
WOLFE RD

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700



S.F.
101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
PAGE MILL RD
OREGON EXPWY.
EL CAMINO REAL
280

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

HARD DRIVES

Maxtor 7345S

345MB SCSI HARD DRIVE

3.5" X 1"HT.
14msec Access
7345S
#1807673

$249

Quantum™

540MB SCSI HARD DRIVE

1" ht. • 12ms Access • 300,000MTBF
2 Year Warranty • 128K Cache
#1899029

$399

CONNER

1 GIGABYTE SCSI HARD DRIVE

1" SIZE • 9MSEC FAST ACCESS • 256K CACHE
SMALLEST 1 GIGABYTE
#1844890

$619

Quantum™

1.08 GIGABYTE SCSI HARD DRIVE

1.08 GB SCSI-3, 9MSEC, 1" HT, 5 Years Warranty
Model 1080S #1899052

$639

Home of Fast, Friendly, Courteous Service

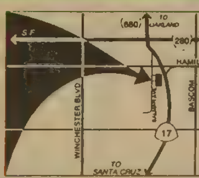
Fry's ELECTRONICS

Prices Good Through September 13, 1994

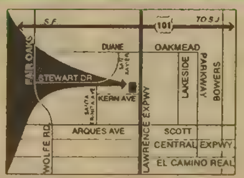
Limit Rights Reserved
Not Responsible For
Typographical Errors

STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

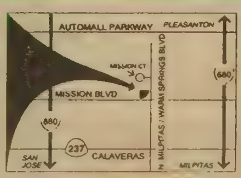
VISA AND MASTERCARD ACCEPTED
CORPORATE P.O. FAX #'s


S.F.
(880) TO OAKLAND
(280) TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

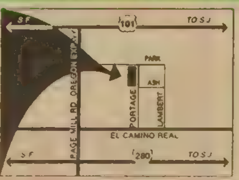
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAWRENCE EXPWY
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
CENTRAL EXPWY
EL CAMINO REAL
WOLFE RD

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
880
680
237
CALAVERAS
SAN JOSE
MILPITAS
N. MILPITAS / WARM SPRINGS BLVD

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S.F.
101
TO S.J.
PAGE MILL RD. OREGON EXPWY
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

YOUR BEST STORAGE TAPE BUYS ARE ALWAYS AT FRY'S!!

120MB TAPE BACKUP

Average Capacity of 120MB with data compression
Plugs into floppy controller
Built-in error correction code
90 days warranty Excel 60F
While Supplies Last!
Limited Quantity On Hand.

$59.95

#1871531

COLORADO MEMORY SYSTEMS INC.

120MB TAPE BACK-UP

Tape Backup

40/60/120MB Format
Back up any size drive from 40MB to 120MB
Runs off Floppy Disk Controller
Internal XT/AT Drive

$97.95

DJ-10
#1498817

CONNER

250MB INTERNAL TAPE BACK-UP

UP TO 288MB WITH DATA COMPRESSION
USES DC2120 TAPE CARTRIDGE
C250MQT

$159.95

#1825747

IBM

TAPE BACK-UP 80MB up to 250MB W/ DATA COMPRESSION

3.5" Form Factor
Runs Standard QIC 80 Software
TD630

$169.95

#1780174

AUTOBAHN

250MB TAPE EXTERNAL BACK-UP

PARALLEL PORT PLUG-IN
CENTRAL POINT BACK-UP SOFTWARE

$289.95

#1810082

HEWLETT PACKARD
Authorized Dealer

5 GIGABYTE DATA TAPE BACK-UP

4MM SCSI • 783KB Per Second
About 47MB Per Minute

$1099

#1842153

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

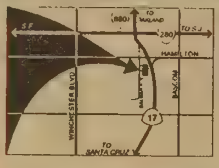
Fry's ELECTRONICS

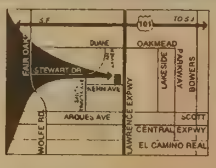
Prices Good Through September 13, 1994

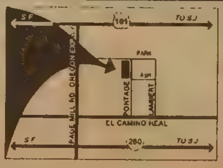
Limit Rights Reserved.
Not Responsible for Typographical Errors.

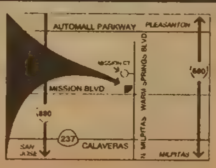
STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #









Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA AND MASTERCARD ACCEPTED

CD-ROM

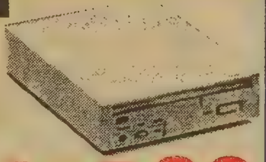
PHILIPS INTERNAL CD-ROM DRIVE

Philips CM205-10 • Single Speed CD-ROM Drive 375ms Access Time 153.6KB Per Second Transfer • Cable, Drivers and Interface Included

#1853249

$69

Internal Double-Speed CD-ROM



- 230ms Seek Time
- 300KB/S Transfer Rate
- Internal Drive
- Includes Cable, Interface and Drivers

$114.99

CDD-110
#1930274

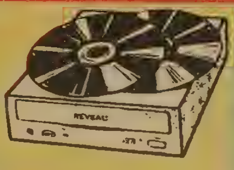
SANYO DOUBLE-SPEED SCSI CD-ROM DRIVE

- 280ms Access Time
- 300 KB/S Transfer Rate • 256K Buffer Size
- CD-ROM XA, Photo CD
- SCSI-2 Internal Drive

CDR-H93 #1928903

$168

REVEAL



"OFFICE CD" COLLECTION
7 CD SOFTWARE TITLES

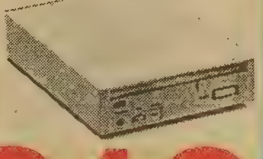
Internal • Double Speed 320ms access 300KB/S data transfer rate • Multisession Photo CD ready • Cable, Mounting hardware, and installation video.

$249.99

CDD23
#1916931

IBM

DOUBLE SPEED INTERNAL CD-ROM DRIVE



- 300 KB/S transfer rate
- 250 ms access time
- Interface card included.

$212

CD 654
#1856666

PLEXTOR
Formerly Texel

INTERNAL QUAD-SPEED CD-ROM

SCSI CD-ROM • 150ms Access • 600KB/sec Transfer Rate • 1MB Buffer • 2 Year Warranty

$445

TXL-PX-43CH
#1934957

CREATIVE
CREATIVE LABS, INC.

Sound BLASTER
SPEAKERS
SBS300
CREATIVE LABS

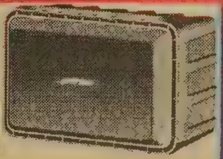
MULTIMEDIA SPEAKERS
SBS-300

Enhance your multimedia experience. Provides endless hours of deep acoustic audio reproduction. Includes 14v DC power supply.

$99.99

#1829062

BOSE®



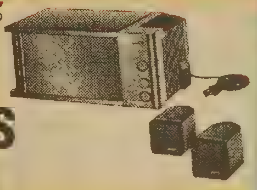
ROOM MATE SPEAKERS

- Shielded Bose® HVC driver for minimum video interference.
- Volume Control; power transformer.
- Built-in amplifier and equalizer for true high fidelity

$249

#1934360

BOSE®



ACOUSTIMASS SPEAKERS

- One 13.3cm woofer in an Acoustimass bass module and two magnetically shielded 6.4cm wide-range drivers in cube speakers.
- Rich, powerful sound
- Deep bass frequencies with no distortion.

$599.99

#1934359

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

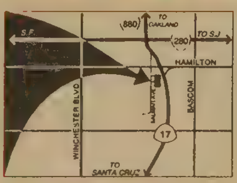
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

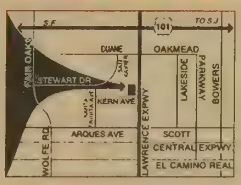
STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

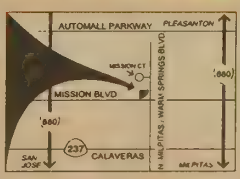
CORPORATE P.O. FAX #'s


S.F.
880
TO OAKLAND
280
TO S.J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

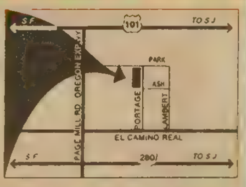
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F
101
TO S.J
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
WOLFE RD
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
880
237
CALAVERAS
SAN JOSE
N MILPITAS / WARM SPRINGS BLVD
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S F
101
TO S J
PARK
ASH
OREGON EXPWY
PAGE MILL RD
PORTAGE
LAMBERT
EL CAMINO REAL
280
TO S J

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

maxell®

MF2-HD 3.5" DS/HD HI-DENSITY DISKETTES
BOX OF TEN
$\$7^{49}$
#139540

MF2-HD 3.5" DS/HD IBM FORMATTED DISKETTES
BOX OF TEN
$\$7^{99}$
#1495700

MF2-HD 3.5" DS/HD MAC FORMATTED DISKETTES
BOX OF TEN
$\$8^{49}$
#1764116

MF2-HD 3.5" DS/HD IBM FORMATTED COLOR DISKETTES
BOX OF TEN
$\$7^{99}$
#1890651

OC-012 M/O 128MB 3.5 REWRITABLE OPTICAL DISK
$\$29^{99}$
#1764127

DC-2000R 40MB 1/4" DATA CARTRIDGE
205ft.
$\$11^{49}$
#1630606

DC-2120R 120MB UP TO 250MB UNFORMATTED CARTRIDGE
$\$14^{99}$
#1720235

DC-2120R QIC-80 120MB up to 250MB QIC-80 Formatted DATA CARTRIDGE
$\$15^{49}$
#1720246

HS-8/112 2.5GB 8MM HELICAL SCAN DATA CARTRIDGE
$\$9^{99}$
#1527230

HS-4/60 1.3GB 4MM HELICAL-SCAN DATA CARTRIDGE
$\$9^{79}$
#1527229

HS-4/90 2GB 4MM HELICAL-SCAN DATA CARTRIDGE
$\$11^{99}$
#1630558

HS-4/120s 4GB 4MM HELICAL SCAN DATA CARTRIDGE
$\$20^{99}$
#1870161

DC-600A 60MB 1/4" DATA CARTRIDGE
$\$15^{49}$
#1630581

CS-600 XD 155MB STREAMER CASSETTE
$\$15^{95}$
#1527218

CS-600 HD 60MB CASSETTE
$\$14^{95}$
#1282460

CS-600 SX 600MB STREAMER CASSETTE
$\$26^{99}$
#1764138

DC-6150R 150MB 1/4" DATA CARTRIDGE
$\$14^{49}$
#1630592

DC-6250R 250MB 1/4" DATA CARTRIDGE
$\$17^{99}$
#1720224

CS-500 HD 50MB STREAMER TAPE
$\$11^{99}$
#1296030

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

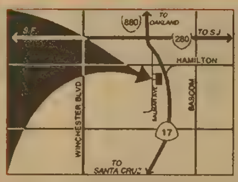
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

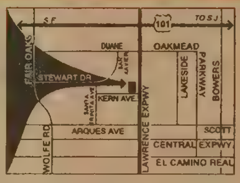
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

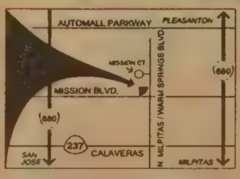
CORPORATE P.O. FAX #'s


S.F.
880
TO OAKLAND
280
TO S J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

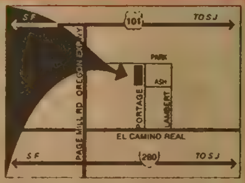
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S F
101
TO S J
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE.
SANTA BENITA AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
WOLFE RD
LAWRENCE EXPWY
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD.
680
880
N MILPITAS / WARM SPRINGS BLVD
237
CALAVERAS
SAN JOSE
MILPITAS

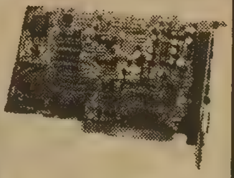
FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S F
101
TO S J
PARK
ASH
PAGE MILL RD OREGON EXPWY
PORTAGE
LAMBERT
EL CAMINO REAL
280

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

MULTIMEDIA

CREATIVE
CREATIVE LABS, INC.

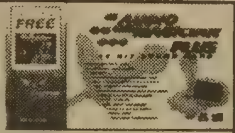


SOUND BLASTER SOUND CARD

- 11 Voices FM Music
- Joystick Port
- Midi Interface
- Volume Control
- Cable

$39.99

#1934566



CALYPSO AUDIO MAGICIAN PLUS SOUND CARD 16-BIT PERFORMANCE AT AN 8-BIT PRICE SOUND BLASTER & AD-LIB COMPATIBLE

Microphone Jack • Game Port • Audio Recorder Audio Reminder Talking Clock • Talking Calculator • Audio Clip Library • Timer and Stopwatch

CALYPSO PRODUCTS INC.

$39.99

#1811784

QuickShot® by Bondwell

SOUND PRO 16

- 16 Bit Sound Card
- Speakers
- Game Pad
- 3 Game Software

$89.99

#1935110

AUDIO MAGICIAN 16CD

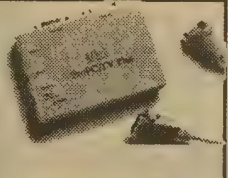
- 16 Bit Sound Card
- 4 CD Interfaces
- Stereo Sound Built-In
- 5 Channel Mixer

CALYPSO PRODUCTS INC.

$79.99

#1917725

AITech



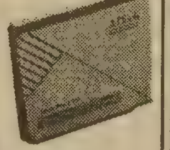
Pro PC/TV Plus Portable PC-to-TV Encoder

- External VGA-to NTSC converter (VGA to TV/videotape) for your laptop or desktop PC
- Supports 640 X 480 X 16.7 million colors VGA & Super VGA
- Drives both VGA and TV simultaneously
- Overscan/underscan capabilities
- S-Video (SVHS) output for high quality video recordings/displays
- Anti-flicker circuit for sharp Windows display

$189.99

#1821433

AITech



MultiPro CTV

External VGA-to-video/TV encoder for your PC or Macintosh®

- Record,edit or playback audio and video from your PC or Macintosh video output.
- Easy to use and easy to install-just plug and play
- Supports up to 16.7 million (24-bit) colors with standard VGA (640x480) resolution.
- Dual display support cability (VGA monitor and TV/VCR simultaneously).

$279.99

#1906835

STUDIO MAGIC FOR WINDOWS

PERSONAL VIDEO STUDIO

PC Video Production Studio with built-in sound, video & computer graphics sequencer.

- Video Overlay/Titler
- Auto Production
- VGA/NTSC Preview Windows
- Transitions
- Chroma/Luma Special Effects

$429

#1936122

Digispeech Inc.

PORTABLE SOUND PLUS

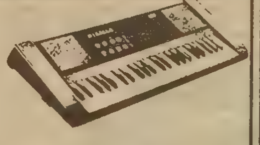
Complete External CD Quality Sound Solution For Laptops or Desktop PC's.

- External 16-bit Sound Card and Speaker Unit
- Stereo or Mono Playback at 16-bits • 4KHz to 44.1KHz Sampling Rate
- Windows 3.1 Compatible
- Connects to Parallel Port
- Advanced DSP Technology

$159.99

#1800517

THE SOFTWARE TOOLWORKS



PIANO TEACHING SYSTEM

First piano that teaches you how to play it! Enjoy video games while mastering basic piano techniques. Customizes individual learning with creative, interactive MS DOS software. Connects through any IBM compatible Serial Port

$219.99

#1623879

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

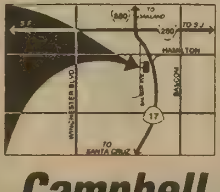
Fry's ELECTRONICS

Prices Good Through September 13, 1994

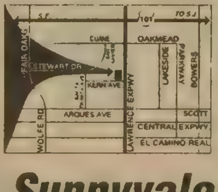
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

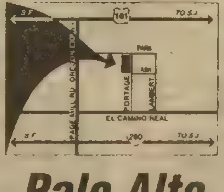
CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

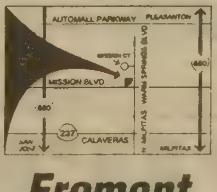
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
TO S.J
FAIR OAKS
CURIE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
SCOTT
WOLFE RD
LAWRENCE EXPWY
CENTRAL EXPWY.
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


S.F
101
TO S.J
PARK
ASH
PORTAGE
LAMBERT
PAGE MILL RD
EL CAMINO REAL
S.F
280
TO S.J

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard
VISA AND MASTERCARD ACCEPTED

MULTIMEDIA

CREATIVE
CREATIVE LABS, INC.

GAME BLASTER CD 16 MULTIMEDIA KIT

Get four of today's top ten exciting PC game titles with Game Blaster CD 16. Includes Sound Blaster 16 MultiCD audio card, Creative's Double-Speed Technology CD-ROM drive, high-performance joystick, speakers and an assortment of the hottest-selling games including Iron Helix, Rebel Assault, Sim City 2000 and Return to Zork.

$358

#1901863

FAMILY DELUXE MULTIMEDIA KIT

- Award winning 16-Bit Sound Card
- Ultra-Fast Double Speed CD-ROM Drive
- 320ms Access Time
- Two Stereo Speakers
- 9 Software Titles - $950 Value!

$329

MV-2000
#1901092
MEDIA VISION

SUPER DELUXE MULTIMEDIA KIT

- 16-Bit Digital Stereo Sound Card
- Incredible Double Speed CD-ROM Drive
- 320ms Access Time
- Photo CD Multi-session Ready
- Amplified Speakers
- Condensor Microphone
- 15 Software Titles - $1,300 Value!

$378

MV-3000
#1901070
MEDIA VISION

SoundWave/CD Multimedia Kit

- Orchid CDS-3110 CD-ROM Drive
- Kodak Multisession Photo CD Ready
- DSP with Wavetable Synthesis
- 1MB of Wavetables Samples
- "SoundWave 32" 16-bit CD Quality Sound Card
- MPC CD-ROM Compatible
- 4 CD-ROM Titles

$339.99

#1872598
ORCHID

CREATIVE
CREATIVE LABS, INC.

SOUND BLASTER DIGITAL EDGE 3X

SOUNDBLASTER 16 SCSI-2 WITH ADVANCED SIGNAL PROCESSING

- Digital signal processing of 16-bit wave signals
- Stereo Speakers and microphone
- Triple Speed SCSI CD-ROM Drive
- 450KB/sec data transfer rate
- 195ms access time

$668

#1901852

Sun Moon Star

DOUBLE-SPEED CD-ROM 16-BIT SOUND CARD MULTIMEDIA KIT

- 18 Months Warranty
- Philips Double-Speed CD-ROM Drive
- Media Vision Jazz 16-Bit Stereo Sound Card with CD Interface
- Stereo Mini Speakers

$199.99

#1935198

MEMPHIS

SOUND AND SPEAKER COMPONENT SYSTEM

- 16-bit stereo Recording and Playback (16-bit linear CODEC)
- Sample frequency from 4 to 44.1KHz
- Microphone, external line-in, and CD-ROM audio inputs allow for the highest CD-quality recordings from a variety of sources
- The Memphis is fully 100% compatible with Soundblaster, AdLib, Pro Audio Spectrum 16, MPC 1 & MPC 2, Windows 3.1 and NT, OS2 2.1, NextStep
- Five CD-ROM Titles

$399.99

MEDIA VISION
#1844948

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

Fry's ELECTRONICS

Prices Good Through September 13, 1994

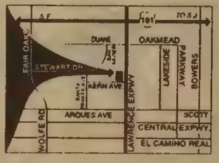
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #

S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

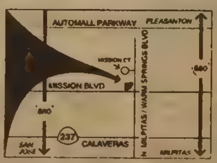


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
ARQUES AVE
LAWRENCE EXPWY
LAKESIDE
PARKWAY
BOWERS
SCOTT
CENTRAL EXPWY.
EL CAMINO REAL
WOLFE RD

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800

S.F.
101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
280
PAGE MILL RD

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
880
680
237
CALAVERAS
SAN JOSE
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard
VISA AND MASTERCARD ACCEPTED

MONITOR SUPPLIES AND ACCESSORIES

SCREENIES

DECORATIVE MONITOR FRAMES

Ren and Stimpy, Simpsons, Loony Toons, City Maze, Greco, Wipe-Off, Space Station, Cork Board, Etch-A-Scetch and many more...

$8.99

MONITOR ADAPTER CABLE

CMA 0001 #156676

$4.95

CABLE Connection

6 FT. IBM MONITOR EXTENTENSION CABLE

IME 9906 #142702

$8.49

CABLE Connection

MEMOREX COMPUTER SUPPLIES

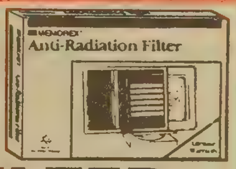
ANTI-GLARE FILTER

- Blocks 95% of Glare
- Optically Coated Glass
- Prevents Eyestrain and Fatigue
- Easy Mounting with Strap on Hangers
- Universal Size fits up to 15" Monitor

#1672910

$36.95

MEMOREX COMPUTER SUPPLIES


MEMOREX
Anti-Radiation Filter

UNIVERSAL ANTI-RADIATION FILTER

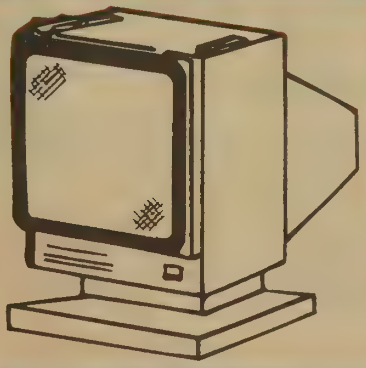
For monitors up to 15"
99% Glare Reduction
98% Very Low Frequency
& Extremely Low Frequency
E-Field Radiation Protection
#1672921

$49.99

RETINAL RELIEF

ANTI-GLARE FILTER

For 14" Color Monitor
Cuts ultraviolet and daylight reflection,
Enhance screen sharpness and contrast
#1620212



$5.99

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

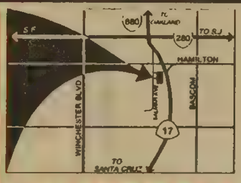
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

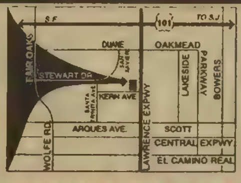
STORE HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-9PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

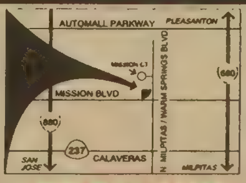
CORPORATE P.O. FAX #'s


S F
880
TO OAKLAND
280
TO S.J
HAMILTON
WINCHESTER BLVD
17
BASCOM
TO SANTA CRUZ

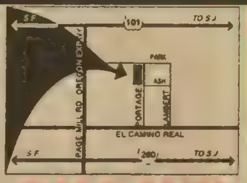
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


S F
101
TO S.J
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
SAN AVEN
KERN AVE
SANTA ARMITA AVE
LAKESIDE
PARKWAY
BOWERS
LAWRENCE EXPWY
ARQUES AVE
SCOTT
CENTRAL EXPWY
WOLFE RD
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
N. MILPITAS / WARM SPRINGS BLVD
680
MISSION BLVD
880
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S F
101
TO S J
PAGE MILL RD. OREGON EXPWY
PARK
ASH
PORTAGE
LAMBERT
EL CAMINO REAL
S F
280
TO S J

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

YOUR BEST SOFTWARE BUYS ARE ALWAYS AT FRY'S!

SIDEKICK 1.0 FOR WINDOWS

Makes it easy to stay organized and in-touch. Keep appointment schedules, manage addresses and phone numbers, create to-do lists, track phone calls and more!

$\$29^{95}$

IBM
#1929535

Microsoft® Windows™ 3.11 for Workgroups Add-On

Microsoft
WINDOWS
FOR WORKGROUPS ADD-ON

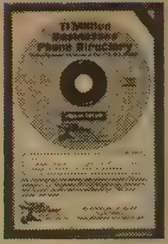
Operating System Upgrade for any PC Running Windows 3.1
Speed up the Microsoft Windows operating system 3.1 with this upgrade, whether your computer is networked or stand alone. With it, you can use a fax modem to send and receive faxes directly to your PC and with a network card, you can exchange files and share printers with other PCs in your workgroup. Any way you look at it, you get the fastest, best version of Windows for your PC.

$\$49^{95}$

IBM
#1863203

American Business Information®

11 MILLION BUSINESSES' PHONE DIRECTORY


11 Million Businesses' Phone Directory

11Million Businesses' Phone directory is just what you need to locate every business name, phone number and address in the U.S. and Canada.

$\$19^{95}$

IBM CD-ROM
#1815467

PROCOMM PLUS for Windows™

PROCOMM PLUS for Windows

The most powerful, most easy to use communication software that speaks your language.

$\$129^{95}$

IBM
#1932346

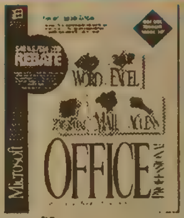
The Eagerly Awaited TIEFIGHTER

The Sequel to X-Wing is here! Includes:
- Enhanced 3-D Graphics of Imperial and Rebel Star Fighters plus a multitude of new spacecraft.
- Compelling storyline loaded with spectacular cinematic cut-scenes
- Over 50 brand new adrenoline-pumping missions you can fly non-sequentially

$\$49^{95}$

IBM
#1923805

Microsoft® Office Pro 4.3 For Windows™ Upgrade

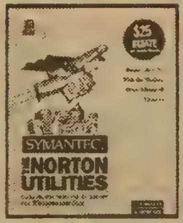

REBATE
Microsoft
WORD
EXCEL
POWERPOINT
MAIL
ACCESS
OFFICE

Now comes with Microsoft® Access 2.0! And includes Excel 5.0, Microsoft® Word 6.0, Microsoft® Powerpoint 4.0, and Mail 3.2.

$\$359^{95}$

#1905856

THE NORTON UTILITIES VERSION 8.0

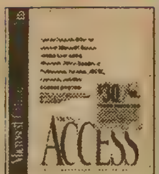

$25 REBATE
SYMANTEC.
THE NORTON UTILITIES

The best selling Norton Utilities now does Windows™! The New Norton Utilities 8.0 Contains all the powerful tools that have made it the worldwide standard for data protection and recovery.
- Improved Norton Disk Doctor now operates in the background continuously protecting files.
- New System Watcher monitors vital system resources and alerts any dangerous changes.

$\$118^{95}$

#1897441

Microsoft® ACCESS® 2.0 for Windows™ Special Upgrade Offer


$30
Microsoft
ACCESS

For user of Microsoft Accsess version 1.1 or earlier, Microsoft Office Standard or Professional, Paradox, dBase, Approach, and other database programs. Rushmore query technology means blazing query speed-up to 100 times faster than Microsoft Access version 1.1.
Proof of Ownership Required.

$\$128^{95}$

#1912085

LANDMARK
703 Grand Central Street • Clearwater FL 34616

After Dark 3.0 for Windows

After Dark
SCREEN SAVER
NEW

The best in screen saver software, just got better with:
- Over 30 displays, 15 of them are new.
- Ecologic power manager
- Multi-module
- Password protection

$\$29^{95}$

#1933381

SIERRA®

OUTPOST for CD-ROM

Is the best science fiction software ever published.' It places you in control of the most comprehensive strategy simulation. The legacy of the Earth depends on your survival.

$\$42^{95}$

IBM
#1918195

COMPUSERVE KIT FOR WINDOWS

CompuServe

The world's most comprehensive computer information service. Your membership gives you unlimited connect-time to access newswires, travel reservation systems, basic stock quotes, a reference library, electronic shopping and games. Compuserve has more international databases and forums than any online service.

$\$28^{95}$

IBM
#1872118

DELRINA

COMMUNICATION SUITE 2.0

Communications SUITE

Now you can get two great products in a single, affordable package.
- WinFax Pro 4.0
- WinComm Pro

$\$124^{95}$

IBM
#1913938

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

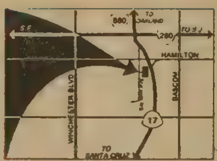
Fry's ELECTRONICS

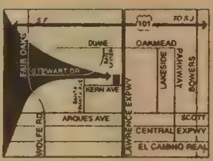
Prices Good Through
September 13, 1994

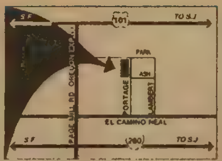
Limit Rights Reserved.
Not Responsible for
Typographical Errors.

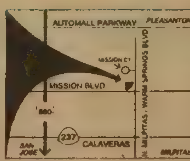
STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #


S.F.
880
TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ


S.F.
101
TO S.J.
DUANE
OAKMEAD
FAIR OAKS
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL


S.F.
101
TO S.J.
PARK
ASH
PORTAGE
LAMBERT
PAGE MILL RD
OREGON EXPY
EL CAMINO REAL
280


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD
880
N. MILPITAS
237
CALAVERAS
SAN JOSE
MILPITAS

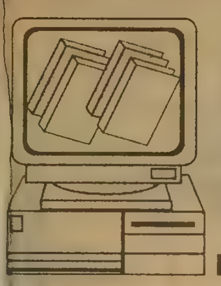
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard
Visa and MasterCard Accepted



COMPUTER BOOKS

MACINTOSH

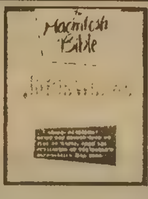
FRIENDLY MACINTOSH
BASIC INFORMATION FOR THE NEW USER

A quick, no-nonsense approach to learning the basics of the Macintosh.

$\$4^{95}$

#1847170

The Macintosh Bible Guide To CLARIS WORKS 2.1

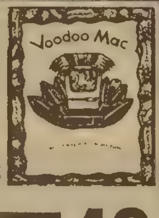

Macintosh Bible

With ClarisWorks you have the benefit of seamless integration among the modules: Word processor, Spreadsheet, database, painting, Drawing, and Communications

$\$18^{95}$

#1906466

VOODOO MAC
TIPS & TRICKS WITH AN ATTITUDE

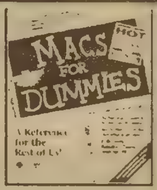


Voodoo Mac gives you the "best of the best"without making you slog through huge reference books, bibles and other bricks.

$\$17^{49}$

#1785445

MACS FOR DUMMIES SECOND EDITION


MACS FOR DUMMIES
A Reference for the Rest of Us!

The fun and easy way to learn about your Macintosh

$\$17^{49}$

#1876787

Inside Mac Files	#1728303	$\$25^{95}$
Little Mac Book 4th Edition	#1781555	$\$12^{95}$
Mac Multimedia Workshop	#1802704	$\$34^{95}$
Using Word 5.1 For Mac Special Edition	#1793310	$\$25^{95}$
Symantec C++ Programming for Macintosh	#1822870	$\$34^{49}$
Using Microsoft Works 3.0	#1803059	$\$18^{49}$
Using Filemaker Pro 2.0	#1763230	$\$24^{49}$
Incredible Mac Sound MA w/disk	#1763001	$\$30^{49}$

INTERNET

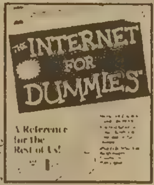
INTERNET MAILING LISTS
REVISED FOR '93

This guide contains the "List of Lists" – a compilation of over 800 special interest group mailing lists maintained by the Network Information Systems Center at SRI International.

$\$25^{49}$

#1857656

INTERNET FOR DUMMIES


THE INTERNET FOR DUMMIES
A Reference for the Rest of Us!

The Internet is the fastest growing source of information and services for millions of computer users. For novice users unsure how to take advantage of the world's biggest computer network, The Internet For Dummies provides a vital reference that'll enable you to swap e-mail, conversation, software, and more across the globe!

$\$17^{49}$

#1876983

THE INTERNET COMPANION
A BEGINNER'S GUIDE

INTERNET COMPANION

Welcome to Internet, the global web of computer networks reaching millions of people all over the world. From the mundane to the technical, the numorous to the scientific, the Internet is an open door to the latest information on medicine, environmentalism, sports, politics, social issues, education and much more.

$\$11^{49}$

#1763023

INTERNET BASICS:
Your Online Access to the Global Electronic Superhighway

Join hundreds of interesting forums, get information from thousands of sources, use software from powerful computers and instantly extend your reach around the globe meeting fascinating people along the way.

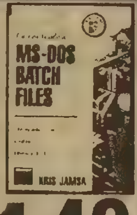
$\$23^{95}$

#1847491

Instant Internet Guide	#1936694	$\$12^{95}$
Internet Guide For New Users	#1809125	$\$24^{49}$
Internet Directory	#1879986	$\$21^{95}$
Internet The Complete Reference	#1879768	$\$25^{95}$
Zen And The Art Of The Internet	#1896392	$\$20^{95}$
Connecting To Internet Buyer	#1876857	$\$13^{95}$
1994 Internet White Page	#1928604	$\$25^{95}$
The Internet Yellow Page	#1911408	$\$24^{49}$

OPERATING SYSTEMS

CONSISE GUIDE TO MICROSOFT DOS BATCH FILES

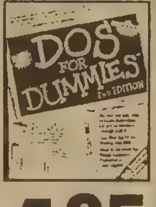

MS-DOS BATCH FILES
KRIS JAMSA

Batch files offer an easy and instantly rewarding way to significantly increase your productivity and to simplify how you use the MS-DOS operating system.

$\$11^{49}$

#1876754

DOS FOR DUMMIES
2ND EDITION


DOS FOR DUMMIES
2nd EDITION

DOS For Dummies, the #1 bestselling computer book for beginners, is now back in a completely revised and updated 2nd Edition. Bigger, better, and dumber than ever. DOS For Dummies, 2nd Edition contains new and more indepth coverage on topics requested by our loyal readers

$\$14^{95}$

.#1851649

MICROSOFT WINDOWS NT RESOURCE KIT

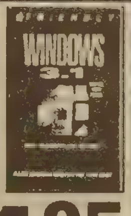
WINDOWS NT
RESOURCE KIT

This three-volume Microsoft exclusive provides complete technical and performance information for computer professionals working with Windows NT.

$\$95^{95}$

#1880142

FRIENDLY WINDOWS 3.1
BASIC INFORMATION FOR THE NEW USER



A quick, no-nonsense approach to learning the basics of the Windows.

$\$4^{95}$

#1776373

Mastering DOS 6.2 Special Edition	#1899937	$\$25^{95}$
Running Microsoft DOS 6.2	#1918081	$\$17^{49}$
Friendly DOS 6.0	#1847181	$\$4^{95}$
DOS 6.0 Power Tools	#1847387	$\$34^{49}$
More Windows For Dummies	#1937581	$\$17^{95}$
Using Windows 3.1 Special Edition	#1767131	$\$25^{95}$
Microsoft 3.1 Guide To Programming	#1777835	$\$25^{95}$
Programming Windows 3.1	#1719507	$\$34^{95}$

Home of Fast, Friendly, Courteous Service

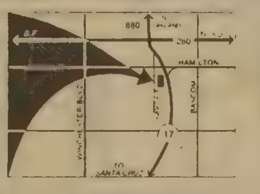
Fry's ELECTRONICS

Prices Good Through September 13, 1994

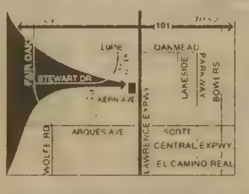
Limit Rights Reserved
Not Responsible For
Typographical Errors

HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

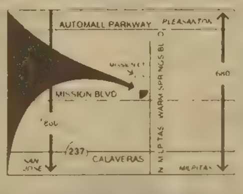
VISA AND MASTERCARD ACCEPTED


S.F.
880
280
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

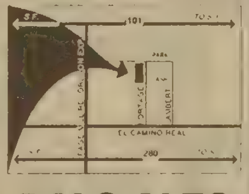
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595


101
FAIR OAKS
STEWART DR
KERN AVE
OAKMEAD
LAKESIDE
PARKWAY
BOWERS
WOLFE RD
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


AUTOMALL PARKWAY
PLEASANTON
MISSION CT
680
MISSION BLVD
WARM SPRINGS BL
880
237
CALAVERAS
SAN JOSE
MILPITAS

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700


S.F.
101
PORTAGE
LAMBERT
EL CAMINO REAL
280

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

CORPORATE P.O. FAX #'s

OFFICE SUPPLIES

LASER/COPY PAPER

$1.79 PER REAM

20 LB • 500 Sheets • 8.5" x 11" • Cut Sheet, #91960

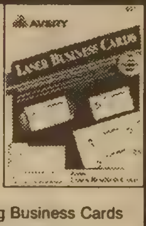
BUSINESS CARD SUPPLIES

UMAX BUSINESS CARD READER

$229

THE SIMPLEST WAY TO MANAGE YOUR BUSINESS CONTACTS BY UMAX.

There's only one place to put all your valuable business contacts. The BizCard Reader allows you to quickly and easily read, store, and manage your collection of business cards. Simply feed all your loose business cards into BizCard Reader to eliminate time consuming sorting and filing. • 400dpi Resolution • 10 sec. max per card read out speed • Parallel port PC interface and much more!
#1936591

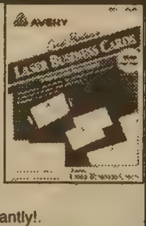

AVERY
LASER BUSINESS CARDS

Avery LASER BUSINESS CARDS

Create Professional Looking Business Cards Instantly!.
- Perfect for small quantities, title or address changes and new employees
- Easy to format using WordPerfect®, Microsoft® Word & more

$9.99

5371
#1864553


AVERY
LASER BUSINESS CARDS

Avery LASER BUSINESS CARDS

Create Business Cards Instantly!.
- Easy to format using WordPerfect®, Microsoft® Word & more
- Sheets feed automatically through Laser Printers
- Designed for Laser Printers only
- Bulk Pack

$94.99

5911
#1938157

AVERY
LASER DISKETTE LABELS

Avery LASER DISKETTE LABELS

Ideal for Organizing Your Diskettes.
- Easy to use format using WordPerfect®, MicroSoft® Word & More.
- Sheets feed automatically through Laser & InkJet Printers.
- 3.5" Diskette
- White
- 70 Sheets

$32.99

5196
#1613717

AVERY
LASER LABELS

Avery LASER LABELS

Great looking labels - A few at a time!
- Designed for HP and other laser printers
- Works with HP and Canon portable InkJet Printers.

$5.49

2186
#1841093

AVERY
INK JET LABELS

Avery INK JET LABELS

Ideal for:
- Envelope Addressing
- Package Addressing
- Routing/Action Messages
- File Folder Identification
- Roatry Cards

$8.99

8160
#1864461

OFFICE PAPER SUPPLIES

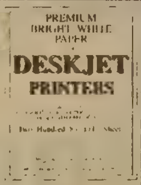
PARCHMENT
DESKJET PRINTERS

DeskJet PARCHMENT PAPER

24 LB
100 Sheets
8.5" x 11" Sheets

$5.99

#1553589


PREMIUM BRIGHT WHITE PAPER
DESKJET PRINTERS

PREMIUM BRIGHT WHITE DeskJet PAPER

24 LB
200 Sheets
8.5" x 11" Sheets

$6.99

#1551989

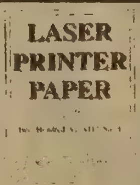
BRIGHT WHITE
LASER PAPER

BRIGHT WHITE DeskJet PAPER

24 LB
200 Sheets
8.5" x 11" Sheets

$7.49

#1551945


LASER PRINTER PAPER

Laser PRINTER PAPER

High Quality, 24LB
200 Sheets
8.5" x 11" Sheets

$7.49

#1788208

PREMIUM BRIGHT WHITE PAPER
DESKJET PRINTERS

PREMIUM BRIGHT WHITE DeskJet PAPER

24 LB
500 Sheets
8.5" x 11" Sheets

$13.99

#1732322

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

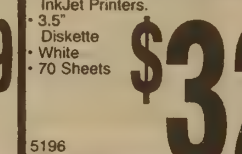
Fry's ELECTRONICS

Prices Good Through September 13, 1994

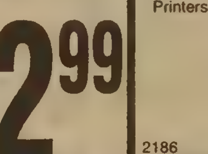
Limit Rights Reserved. Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

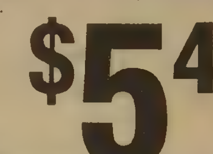
CORPORATE P.O. FAX #


S.F.
880
280
HAMILTON
WINCHESTER
BASCOM
17
TO SANTA CRUZ

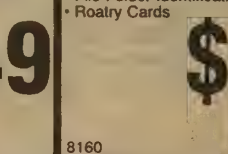
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595


S.F.
101
FAIR OAKS
STEWART DR
KERN AVE
OAKMEAD
LAKESIDE
PARKWAY
BOWERS
AROUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800


S.F.
101
PAGE MILL RD
OREGON EXP
PORTAGE
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044


AUTOMALL PARKWAY
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard
VISA AND MASTERCARD ACCEPTED

SURGE PROTECTION

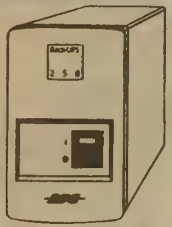
APC
AMERICAN POWER CONVERSION

POWERCELL 250
250 VOLT/AMP BACK-UP POWER SUPPLY

UNINTERRUPTABLE POWER SUPPLY

- 480 Joule Surge Protection Built-In
- 2 Outlet
- Modified Sine Wave Output

#1851362



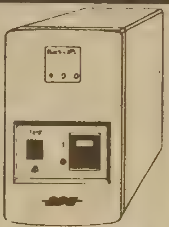
$99.99

APC
AMERICAN POWER CONVERSION

BACK UPS 400

400 VA Backup Power Supply
Built-in Surge Protection
EMI/RFI Noise Filtering
10 Minutes of Power at
400VA usage
DB9 Interface Port

#1651175



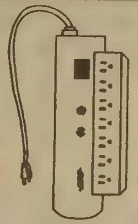
$199.99

APC
AMERICAN POWER CONVERSION

7-OUTLET SURGE ARREST

240 Joules Dissipation
Site Fault Wiring Indicator
Reduce Intermittent
Lock Ups and Parity Errors
With EMI/RFI Filtering

#1651256



$19.99

MEMOREX
COMPUTER SUPPLIES

6-OUTLET
SURGE SUPPRESSOR

- Maximum Surge Dissipation 120 Joules
- EMI/RFI Filtering
- Sin Root Heavy Duty Cord
- Response Time: Less than 1 Nanosecond
- UL 1449 Approved

#1896749

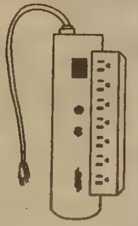
$10.99

APC
AMERICAN POWER CONVERSION

SURGE ARREST PLUS

7-Outlet
480 Joules Dissipation
EMI/RFI Filtering (Helps Reduce
Random Lock-Ups & Parity Errors)
Site Fault Wiring Indicator

#1651290



$39.99

MEMOREX
COMPUTER SUPPLIES

6-OUTLET
With Fax/Modem Protection

- Maximum Surge Dissipation 120 Joules
- EMI/RFI Filtering
- Sin Root Heavy Duty Cord
- Response Time: Less than 1 Nanosecond
- UL 1449 Approved

#1896761

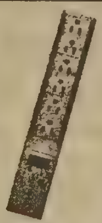
Surge Suppressor

$14.99

WABER, INC.
A Subsidiary of SL Industries, Inc.

EP6S METAL SURGE

MAXIMUM VOLTAGE ALLOWED THROUGH 400V
EP6S 210 JOULE
6-OUTLET SURGE PROTECTOR
EMI/RFI NOISE REJECTION
5 YEAR WARRANTY $250 CNCT EQP
#1840900



$12.99

KENSINGTON®

POWERTREE 10

Suppresses Surges up to 120 Joules
15 AMP Circuit Breaker
Platinum Color
Six outlets

$16.99

#1423578

Home of Fast, Friendly, Courteous Service

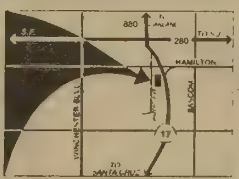
Fry's ELECTRONICS

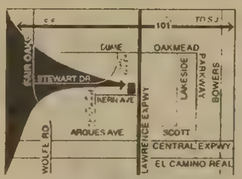
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED


S.F.
880
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ


S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
WOLFE RD
ARQUES AVE
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

AUTOMALL PARKWAY
PLEASANTON
WARM SPRINGS BLVD.
MISSION BLVD
680
880
237
CALAVERAS
MILPITAS

S.F.
101
TO S.J.
OREGON EXPY
PAGE MILL RD
PARK
PORTAGE
LAMBERT
EL CAMINO REAL
280
TO S.J.

	CAMPBELL	SUNNYVALE	FREMONT	PALO ALTO
	600 E Hamilton Ave.	1177 Kern Ave.	440 Mission Ct.	340 Portage Ave.
	(408) 364-3700	(408) 733-1770	(510) 770-FRYS(3797)	(415) 496-6000
CORPORATE P.O. FAX #'s	(408) 364-3595	(408) 735-6800	(510) 770-3700	(415) 496-6044

THE FAX ARE IN!

FRY'S HAS THE BEST SELECTION OF FAX MACHINES IN NORTHERN CALIFORNIA!

COMPACT FAX MACHINE

This unbelievable value comes equipped with a telephone answering machine interface, 10 number speed dialing, last number memory, polling, on-hook dialing, and remote operation (extension phone transfer to fax) all for only...

$189.99

#1820524

SHARP

DESK/WALL MOUNTABLE FAX MACHINE

This Sharp fax machine compact design make it perfect for the home or office. With features that include 16 level halftones, contrast selection, memo pad, last number redial, hold, paper save, anti junk fax, call tracking report (up to 300 calls and fax transmissions/receptions), 20 number memory, and much more, all for just....

$239.95

MODEL NX-1
#1839559

SHARP

FAX

WITH DOCUMENT REDUCTION CAPABILITIES

Sharp's unique time-and paper-saving functions offers several compressions methods to minimize time and paper consumption. The effective size of outgoing documents can be reduced by 20% for faster transmission. And for incoming faxes, it can be set to ignore unprinted areas or reduce documents by 50%. Other features include 50 number memory, 10 page document feeder, 16-level halftone, and much more, all for only...

$248

MODEL UX-104
#1885664

AT&T

PERSONAL FAX

WITH AUTO PAPER CUTTER

WHILE THEY LAST

Perfect for the home or office. This AT&T compact personal fax with auto paper cutter comes equipped with a 5 page document feeder, 12 one-touch dialing numbers and 30 auto dial numbers, on hook dialing, polling, resolution and contrast control, transmission terminal identification, delayed transmission polling and much more, now just...

$259

MODEL FAX-7840
#1850855

SHARP

FAX MACHINE

WITH PAPER CUTTER & DOCUMENT REDUCTION CAPABILITIES

Sharp's unique time and paper-saving functions offer several compressions methods to minimize time and paper consumption. The effective size of outgoing documents can be reduced by 20% for faster transmission. And for incoming faxes, it can be set to ignore unprinted areas or reduce documents by 50%. Other features include 50 number memory, 10 page document feeder, 16-level halftone, and much more, all for only.....

$289

MODEL UX-174
#1885686

MURATEC

FAX MACHINE

WITH PAPER CUTTER & 164' PAPER ROLL CAPACITY

From Muratec comes this fully featured fax machine with automatic paper cutter, 10 page document feeder, 16 level grayscale, block junk fax setting, auto redial, 60 number memory, polling, activity journal, and much more. Now just...

$299

MODEL M-920
#1933336

---

brother We're at your side.

FAX MACHINE

WITH PAPER CUTTER

ACS ANTI-CURL SYSTEM

Brother's breakthrough fax machine incorporates newly developed therma plus technology which uses fax paper that feels like plain paper and reduces print fading (lasts 3 times longer than thermal paper under normal filing conditions, and you can even use a highlighter!). Other features include, 15 page document feeder, 60 station memory, 16 level grey scale, activity report, polling and much more for only...

$299

MODEL FAX-620
#1896510

---

brother We're at your side.

FAX MACHINE

WITH PAPER CUTTER & 32 LEVEL GRAYSCALE

THERMA PLUS PAPER

From Brother the high tech home office leader come this feature laden fax machine with 32 level grayscale for enhanced contrast reproduction, 60 station memory, 10 page auto document feeder, anti-curl mechanism, smoothing, multiple resolution transmission, 16 digit LCD display, activity report, Polling, next fax reservation, and much more. Now just....

$329

MODEL FAX-640
#1917437

Panasonic

FAX

WITH ANSWERING MACHINE & ANTI-CURL

WHILE THEY LAST

This fully featured Fax from Panasonic comes equipped with an auto-logic answering system and an anti-curl mechanism, as well as copier capabilities. It's the perfect secretary for your home or business!

$329

MODEL KX-F180
#1877490

SHARP

FAX MACHINE

WITH PAPER CUTTER AND ALL DIGITAL ANSWERING MACHINE

Sharp's unique time and paper-saving functions offer several compressions methods to minimize time and paper consumption. The effective size of outgoing documents can be reduced by 20% for faster transmission. And for incoming faxes, it can be set to ignore unprinted areas or reduce documents by 50%. Other features include 50 number memory, 10 page document feeder 16-level halftone, and much more, all for only....

$399

MODEL UX-254
#1892848

Panasonic

FAX MACHINE

WITH PAPER CUTTER AND ANTI-CURL

WHILE THEY LAST

This fully featured Fax from Panasonic comes equipped with an auto-logic answering system and auto paper cutter, as well as copier capabilities. It's the perfect secretary for your home or business!

$359

MODEL KX-F280
#1886159

---

brother We're at your side.

FAX MACHINE

WITH 1MB MESSAGE CENTER & PC LINK CAPABLE

Brothers revolutionary fax machine offers a digital message center for either18 minutes of recording, up to 50 page of memory for out of paper reception, or you can configure the storage memory to be usedon a first come first serve basis. The optional missing link will allow this fax machine to act as a PC/fax modem, a scanner, and a printer! Other feature include anti-curl system, uses ThermaPlus paper, quick-scan, 164' paper roll capacity, 15 page document feeder, auto cutter, sequential broadcasting, and 60 number memory just to name a few. Now only...

$449

MODEL FAX-820
#1925195

---

brother We're at your side.

PLAIN PAPER FAX

Brother's done it again! Last year Brother broke the $400 price barrier in paper cutter Fax, and for an encore, Brother has destroyed the $799 stand alone plain paper Fax barrier with this unbelievable value. Its 200 sheet paper cassette, 30 page auto document feeder, on-screen programming, "smoothing" enhanced image resolution, 48 digit LCD display, multiple resolution transmission, 32 level grayscale, 60 station memory, and Fax/Tel Switch makes this the best value you will find at only...

$549

MODEL FAX-900
#1801817

SHARP

PLAIN PAPER FAX

WITH 512 KB MEMORY

Sharp's innovative plain paper fax machine comes fully equipped with 512KB (28 pages total, 8 pages receive only, 20 pages receive and / or send) memory provides various functions such as memory transmission for quick return of the original; sequential broadcasting up to 20 stations; substitute reception for out-of-paper situations; and multicopy, with sorting capability, for making up to 30 copies with one pass of the originals. Other features include 15 page document feeder, 50 number memory, and much much more. All for just...

$698

MODEL UX-1200R
#1853168

Panasonic

PLAIN PAPER FAX MACHINE

WITH 20 PAGE MEMORY

The ultimate plain paper fax from Panasonic features a jumbo LCD display, 70 page paper cassette, adjustable letter/legal tray, 32 level halftones, polling, activity reporting, 20 page document feeder, broadcasting to 128 locations, fax transfer, enlargement and reduction copier functions, fax/tel switch, 28-station one-touch dialer, 100-station speed dialer, telephone directory with alpha-search, and much more! Now just.....

$898

MODEL KX-F3000
#1850626

HEWLETT PACKARD
Authorized Dealer

PLAIN PAPER FAX MACHINE

WITH 512 KBYTES OF UPGRADEABLE MEMORY

This plain paper fax offers 512 Kbytes of memory for 28 page out of paper reception, a 30 page document feeder, 64 gray scale levels, 100 page capacity with easy front reloading, plus many more outstanding features for only...

$899

MODEL HP-FAX950
#1873153

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

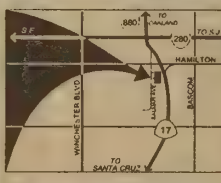
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

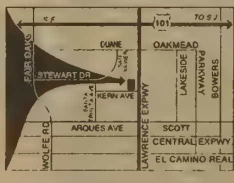
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

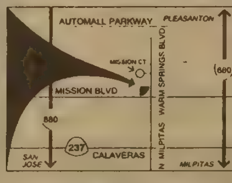
CORPORATE P.O. FAX #'s



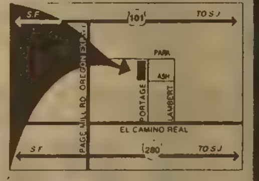
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595



SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700



PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

Authorized Sales Representative

GTE Mobilnet

Get Mobilized℠

GET MOBILIZED AT FRY'S ELECTRONICS

GENERAL ELECTRIC

GE. We bring good things to life

Authorized Sales Representative

GTE Mobilnet

Get Mobilized™

CELLULAR FLIP PHONE

WITH 100 NUMBER ALPHANUMERIC MEMORY

Everyone has flipped for flip phones, and this GE Pocketfone is one of the reasons why! With its 100 Number Alphanumeric Memory (names and numbers can be stored together and scanned alphabetically), Menu Scroll, Dual NAM, 8 Level Call Restrictions, Last Number Redial, Lighted Keypad, Auto Scratchpad, Mute, Low Battery Warning, Speed Dialing, Call Mailbox, 90 Minute Talk Time Battery, Overnight Charger, and much more! Refurbished to work like new at only...

$99.99*

SUPPLIES ARE LIMITED

Model CT-400R**
#1906411

*After $25 Instant Service Activation Rebate. Price Without Activation $124.99

MOTOROLA

Authorized Sales Representative

GTE Mobilnet

Get Mobilized™

ALPHA MICRO-TAC CELLULAR PHONE

If it's small and lightweight you're looking for, this is the cellular phone for you! With its 101 alphanumeric memory, a desktop charger, and standard battery, this technologicaly advanced cellular phone can be yours for only...

$299.95*

Model DPCAC Deluxe**
#1635988

*After $25 Instant Service Activation Rebate. Price Without Activation $324.95

MOTOROLA

Authorized Sales Representative

GTE Mobilnet

Get Mobilized™

CELLULAR FLIP PHONE

This premium value cellular phone from Motorola comes equipped with 30 number memory, LED display, call timer, signal strength meter, a battery with 75 minute total talk time, and an overnight charger for only...

$159.95*AB

A) *After $25 Instant Activation Rebate,
B) And with the purchase of Motorola Travel Pak #1854435 at $59.95. Total Cost without Activation $244.90.

Model DPC-550**
#1635999

MOTOROLA

Authorized Sales Representative

GTE Mobilnet

Get Mobilized™

MICRO TAC LITE CELLULAR PHONE

This popular pocket-sized cellular phone from Motorola combines convenience and high performance with features that include 101 alphanumeric memory, retractable antenna, dual NAM, automatic redial, super speed dialing, battery, overnight charger, carry case and more. Now just...

$439.95*

Model Micro Tac Lite**
#1705832

*After $25 Instant Service Activation Rebate. Price Without Activation $464.95

CELLULAR BATTERIES	BATTERY ELIMINATORS	LEATHER CASES
FOR MOTOROLA MICROTAC #1918391 STARTING AT **$39.99**	**FOR MOTOROLA MICROTAC** #1918313 STARTING AT **$19.99**	**FOR MOTOROLA MICROTAC** #1818482 STARTING AT **$29.95**
FOR MOTOROLA 8000/9000 SERIES #1918416 STARTING AT **$39.99**	**FOR MOTOROLA 8000/9000 SERIES** #1918335 STARTING AT **$19.99**	**FOR MOTOROLA 8000/9000 SERIES** #1818471 STARTING AT **$29.95**
FOR General Electric CT 400R #1918438 STARTING AT **$39.99**	**FOR General Electric CT 400R** #1921722 STARTING AT **$19.99**	***THESE ARE JUST A FEW EXAMPLES OF THE CELLULAR SELECTION AND SAVINGS AT FRY'S***

MOTOROLA

MICRO TAC ULTRA LITE CELLULAR PHONE

WITH VIBRA CALL

Authorized Sales Representative

GTE Mobilnet

Get Mobilized™

Motorola's lightweight champion of cellular phones tips the scales at only 5.9 ounces and contains a unique ring selector that includes a setting for vibrate, just like a pager! Other features include 101 alpha-numeric memory, memory scroll, recall, two batteries, rapid charger, carry case, and more for only ....

$599.95*

Model Micro Tac Ultra Lite**
#1794986

*After $25 Instant Service Activation Rebate. Price Without Activation $624.95

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

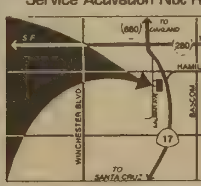
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

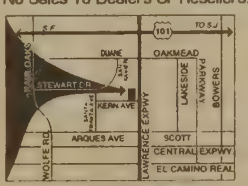
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

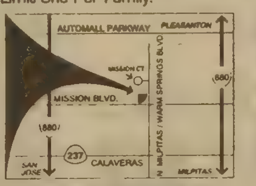
**Service Activation Not Required. No Sales To Dealers Or Resellers. Limit One Per Family.



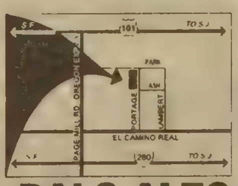
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700



SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700



PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

CORPORATE P.O. FAX #'s (408) 364-3595

YOUR BEST PANASONIC HOME OFFICE BUYS ARE ALWAYS AT FRY'S!

ANSWERING MACHINES

Panasonic

ANSWERING MACHINE

Answering System with Auto-Logic Operation, Tone Remote Control, Digital Display, Message Memo Recording and remote turn on, Auto-Logic Operation automatically rewinds, plays messages, stops at the last message and resets itself at the touch of one button.

$\$39^{99}$

MODEL KX-T1000
#1498194

Panasonic

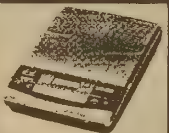
DUAL MICRO CASSETTE ANSWERING SYSTEM

Panasonic's new dual micro cassette answering system offers an LCD Call Counter, marker message, room monitor, auto disconnect, electronic auto disconnect, electronic volume control, audible message alert, and much more for only…

$\$69^{95}$

MODEL KX-T2100
#1740208

Panasonic



TWO LINE ANSWERING MACHINE
WITH VOICE TIME/DAY STAMP

Perfect for the home or office, this Panasonic two line answering machine offers voice time/day stamp, voice prompts, 2 variable greeting messages, room monitoring, message alert, call screening, auto interrupt, toll saver, and more. Now just…

$\$129^{95}$

MODEL KX-T5300
#1768084

Panasonic

ALL DIGITAL ANSWERING MACHINE
WITH 30 MINUTE CAPACITY & VOICE TIME/DAY STAMP

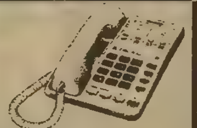
This Panasonic all digital answering machine comes equipped with 30 minutes of total recording capacity and voice promps for time, AM/PM, voice remote menu, number of messages, pre-recorded greeting messages, and time/day stamp on each message. Other features include LCD readout, quick playback, message alert, room monitoring, 2-way and memo recording, and much more! Now just...

$\$159^{95}$

MODEL
KX-T8100
#1914607

BUSINESS PHONES

Panasonic



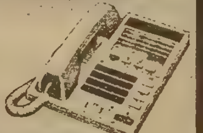
SPEAKERPHONE

For the office or home, this phone has all the features you need. It has a speaker phone, 28 station automatic dialer, automatic redial and much more.

$\$49^{95}$

MODEL KX-T2315
#1530100

Panasonic



TWO LINE SPEAKERPHONE

A perfect compliment to your home or office, this two-line speakerphone comes equipped with 3-way conferencing, 20 number programmability, seperate ring switches for each line, and a local mode function. Now only…

$\$69^{99}$

MODEL KX-T3120
#1510676

Panasonic

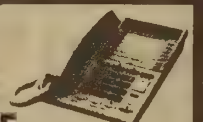
TWO LINE SPEAKERPHONE
WITH LCD DISPLAY

From Panasonic comes this fully featured 2-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 24-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only...

$\$89^{95}$

MODEL KX-T3175
#1745122

Panasonic



THREE LINE SPEAKERPHONE
WITH LCD DISPLAY

From Panasonic comes this fully featured 3-line speakerphone with LCD display, 3-way conference call, volume control for speaker and handset, 48-station one-touch dialer, auto redial, flash, separate ringer tone, line status indicator, memo dial, and save redial, all for only…

$\$169^{95}$

MODEL KX-T3185
#1768039

10 CHANNEL CORDLESS PHONES

Panasonic

10 CHANNEL AUTOSCAN CORDLESS PHONE

Panasonic's newest cordless phone comes equipped with a retractable flexible rubber antenna, sound charger technology, which helps filter out background noise resulting in enhanced sound quality, and 1-way paging between the base and handset. An excellent value at only…

$\$79^{95}$

MODEL KX-T3850
#1764839

Panasonic

10 CHANNEL CORDLESS PHONE
WITH QUICK CHARGE & SECURE GUARD SYSTEM

Panasonic has developed the latest in cordless technology by incorporating a Quick Charge system that will enable you to recharge its battery in one hour providing 7-day standby or 3 hours providing 21-day standby! The Secure guard system can help keep your conversations private and help prevent eaves-dropping scanners or baby monitors. Other features include one paging, 10 number memory, last number redial, flash, auto security code settings and much more for only...

$\$118^{95}$

MODEL
KX-T3940
#1820915

Panasonic

10 CHANNEL AUTOSCAN CORDLESS DUAL KEYPAD SPEAKERPHONE
WITH SECURE GUARD VOICE SCRAMBLING

Panasonic's comes equipped with secure guard which scrambles your voice when others try to listen in on your conversations with other cordless phones, radios or even scanners! Other features include quick charge technology enabling to fully charge the battery in only 3 hours for 21 day standby, 2-way paging, intercom, 10 number memory, high gain antenna, and much more. All for only…

$\$159^{95}$

MODEL
KX-T3965
#1886160

Panasonic

2-LINE 10 CHANNEL CORDLESS PHONE
WITH SPEAKERPHONE

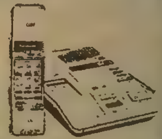
The KX-T3980 is one of the most versital phones Panasonic has ever developed! When you combine the convenience of a cordless phone with the flexibility of a 2-line capability along with speakerphone, 3-way conference, 2-way page, and auto intercom, it all adds up to a value too good to pass up!

$\$179^{95}$

MODEL
KX-T3980
#1671595

10 CHANNEL CORDLESS PHONES WITH ANSWERING MACHINE

Panasonic



10 CHANNEL CORDLESS SPEAKERPHONE
WITH ANSWERING MACHINE

This cordless answering system with sound charger technology delivers sound so clear, you will hardly believe your ears! Some of the features included are, 2- way paging, intercom, auto security system, message alert, 2-way and memo recording just to name a few. Now only…

$\$149^{95}$

MODEL
KX-T4330
#1796483

Panasonic

10 CHANNEL CORDLESS SPEAKERPHONE
WITH ANSWERING MACHINE AND TIME/DAY STAMP

With speakerphone, time/day stamp, 2-way page, intercom, an auto security system, message alert, 2-way and memo recording, time check, 2 message greetings, and much more, this Panasonic cordless speakerphone with micro cassette answering machine is an excellent value at only.....

$\$189^{95}$

MODEL
KX-T4370
#1796494

Panasonic

10 CHANNEL CORDLESS SPEAKERPHONE
WITH DUAL MICROCASSETTE

This top of the line cordless dual microcassette answering system with sound charger technology delivers sound so clear, you will hardly believe your ears! Some of the features included are: 2-way paging, intercom, auto security system, message alert, 2-way and memo recording just to name a few. Now only…

$\$199^{95}$

MODEL
KX-T4400
#1735370

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

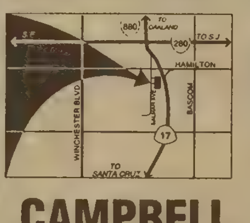
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

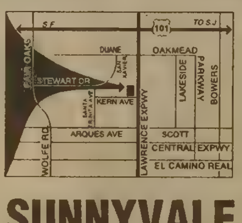
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

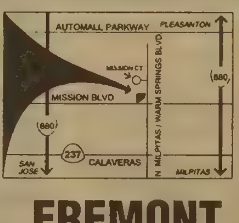
CORPORATE P.O. FAX #'s



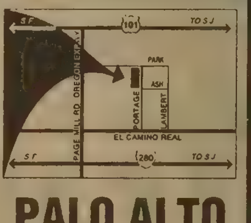
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595



SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700



PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

THINK FRY'S FIRST
FOR HOME OFFICE SERVICE, SELECTION AND SAVINGS

SPEAKERPHONES

BELL Phones BY NORTHWESTERN BELL PHONES
A U S WEST COMPANY

SPEAKERPHONE
WITH 13 NUMBER MEMORY

The convenience of a handsfree speakerphone allows you to do other tasks while carrying on a conversation on the phone. Features include 13 number memory, auto redial, mute, flash, and more. An excellent addition to any home or office at only...

$24 95

MODEL 4350
#1917518

BELL Phones BY NORTHWESTERN BELL PHONES
A U S WEST COMPANY

SPEAKERPHONE
WITH LCD DISPLAY

This Northwestern Bell speakerphone comes loaded with features like an LCD which displays time & date, alarm & timer, and number called display, on-hook dialing, 30 number memory, busy redial, flash, pause, speaker volume control, and much more for only...

$39 95

MODEL 2500S
#1810185

AT&T

SPEAKERPHONE

With features like hands-free speakerphone, 32 number memory, hold, receiver and speakerphone volume control, last number redial, flash, ringer control, programmable pause, mute, just to name a few, this AT&T speakerphone will be an excellent addition to any home or office at only...

$49 95

MODEL 725
#1671621

Panasonic

LCD READOUT SPEAKERPHONE

This outstanding value from Panasonic offers a 12-digit LCD readout for phone number, clock, call timer(minutes and seconds), and operating modes. Perfect for the home or office at only...

$69 95

MODEL KX-T2365
#163665

MULTI-LINE PHONES

BELL Phones BY NORTHWESTERN BELL PHONES
A U S WEST COMPANY

TWO LINE PHONE

Perfect for the home office with multi-line needs, this 2-line phone from Northwestern Bell features line-in-use LEDs, 3-way conferencing, 15 number memory, hold, flash, pause, and ringer controls. An excellent value at...

$39 99

MODEL
Easytouch 2202
#1890905

Panasonic

TWO LINE PHONE

A two line phone doesn't have to cost a fortune. Panasonic has the low cost answer for you. This unit has a convenient auto dialer, conference calling and much more!

$69 95

MODEL KX-T3110
#1505313

GENERAL ELECTRIC
GE. We bring good things to life

FOUR LINE SPEAKERPHONE

This deluxe four-line speakerphone is capable of handling up to four lines with a maximum of 16 stations. Its convenient 32 number one-touch telephone memory, along with all station page, intercom, call transfer, busy redial, flash and much more make this the perfect addition to any home or office at just......

$149 95

MODEL 2-9450
#1768637

AT&T

3-LINE SPEAKERPHONE

AT&T's multi-functional centrex compatible 3-line speakerphone comes equipped with page, intercom, 3-way conference, LCD display, 40 number memory, auto line selection, hold, do not disturb function, auto-redial, mute, programmable pause, call transfer, flash, seperate ringer controls, and more, all for only.....

$179 95

MODEL 843
#1853892

ALL DIGITAL ANSWERING MACHINES

AT&T

ALL DIGITAL ANSWERING MACHINE

This AT&T answering system utilizes tapeless digital technology to ensure consistent recording quality over the life of the system. The convenience of new message playback, outgoing message bypass, remote system turn on or off and remote message recording makes this an excellent value at only...

$69 95

MODEL 1710
#1853906

GENERAL ELECTRIC
GE. We bring good things to life

ALL DIGITAL ANSWERING MACHINE
WITH THREE MAIL BOXES

With three mailboxes to choose from, members of the household can have messages stored for them in their own mailbox! The all digital capability eliminates the need for moving parts and allows for instant playback of incoming messages-no need to wait for a tape to rewind or fast forward! Other features include voice time/day stamp, two outgoing messages, digital counter, selective message erase and much more for only...

$89 95

MODEL 2-9876
#1839261

SONY.

ALL DIGITAL ANSWERING MACHINE
W/ VARIABLE SPEED MESSAGE PLAYBACK

Sony has taken digital technology to a new dimension with this beautifully-designed, all digital answering system. The variable-speed message playback controller allows you to speed up (to 1.6 times speed) or slow down (to 0.7 speed) playback of messages without changing pitch. In addition, you can skip, repeat or backspace messages. The multi-function LCD display functions as a digital message counter, clock, call timer, answer mode indicator, and back-up battery strength indicator, while the voice time/day stamp automatically records the time of the message receipt after each message. Other features include: Voice-guided operation, Pre-recorded greeting, Announce-only mode, Memory usage guage, Audible message alert, Remote on/off, Auto interrupt, Memo recording, 2-way conversation recording, and Adjustable nng delay. An invaluable addition to any home or office at only...

$129 95

MODEL
TAM-1000
#1803901

Panasonic

ALL DIGITAL 4 MAILBOX ANSWERING SYSTEM
W/SPEAKERPHONE & VOICE TIME/DAY STAMP

Panasonic's fully featured answering system comes equipped with 30 minute storage capacity, voice time/day stamp, speakerphone, voice menu, 4 personal mailboxes with security, lcd display, message scan, programmable alarm, message transfer, 2-way record, selective message delete, message skip/repeat, auto disconnect, auto redial, 10 number memory, and much more! An invaluable addition to any home or office at just...

$199 95

MODELKX-T2880
#1841989

COPIERS

SHARP

PORTABLE COPIER

This Sharp copier weighs in at just 14.8 lbs. and is amazingly compact and lightweight, making it easy to be carried or stored in a small place. Features include auto exposure control, auto start function, auto power shut-off mode, which completely cuts the power approx. 90 sec. after you finished copying. An excellent value at only.....

$279

MODEL Z-20
#1885620

XEROX

LETTER /LEGAL COPIER

Don't settle for a copy when you can have the original... Xerox. Xerox is so confident in the quality and reliability of its copiers that it offers an exclusive 3 year warranty on all its copiers. This model offers a paper tray that stacks 40 sheets, a built-in carrying handle and removable storable paper trays, multi-copy capability which can be set from 1 to 9 copies or "C" for continuous up to 20 copies, and automatic exposure which scans documents for degrees of lightness or darkness to determining the appropriate exposure setting. An invaluable addition to any home office. At only...

$497

MODEL 5222
#1886425

SHARP

LETTER/ LEGAL COPIER
WITH STATIONARY PLATEN

This durable Sharp copier utilizes a stationary platen, a space-saving feature that eliminates the possibility of the copier bumping into objects while in operation. The variable zoom ratio setting adjusts between 70% and 124% in 1% increments giving you more copying flexibility and versatility. Other features include large capacity 250 sheet tray, continuous copy (up to max. 50), auto start, and letter/ legal capacity. An excellent value at...

$699

MODEL Z-85
#1903740

Home of Fast, Friendly, Courteous Service

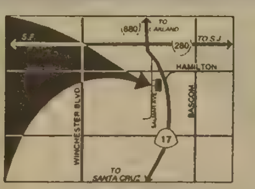
Fry's ELECTRONICS

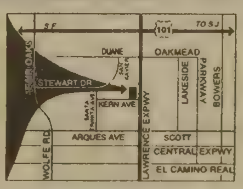
Prices Good Through September 13, 1994

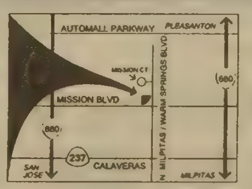
Limit Rights Reserved
Not Responsible For
Typographical Errors

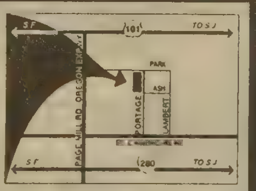
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED









CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595

SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800

FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700

PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

CORPORATE P.O. FAX #'s

FRY'S ELECTRONICS IS YOUR TEST AND MEASUREMENT HEADQUARTERS

PLUS WE STOCK: TEST ACCESSORIES, METER CASES, PROBES, CRYSTALS, OSCILLATORS, RESISTORS, CAPS, EPROMS, PALS, PROGRAMMERS, UV ERASERS, SOLDERING EQUIPMENT, TTL LOGIC, DISCRETES, ELECTRONIC KITS, DATA BOOKS, TECHNICAL BOOKS AND MUCH MORE...

Tektronix

100MHz ANALOG 2 CHANNEL OSCILLOSCOPE

The TAS 465 brings an advanced level of power and reliability to general purpose scopes. It brings leading edge innovation to low-cost analog scopes with comprehensive features. Comprehensive Video Triggering simplifies triggering on complex video waveforms. With line or field (odd, even, or both) composite video selections and positive or negative sync, you can cleanly trigger on any NTSC, PAL, or SECAM video signal. The scopes' dual time base lets you zoom in on any portion of a waveform for closer examination. Auto Setup instantly delivers meaningful waveforms. Pressing the AUTOSET button automatically adjusts the horizontal, vertical, and triggering controls so that a stable signal is displayed.

TAS 465
#1823505

$1995

HITACHI

100MHz LOGIC ANALYZER

32 Data Channels • 5ns Glitch Capture
Multi-Level Triggering • 8K Memory/Channel
The VC-3120 Logic Analyzer provides 25MHz analysis on up to 32 channels. With Soft-Key menus & on-line instructions. This logic analyzer is easy-to-use yet powerful enough for advanced digital design and microprocessor system debugging.

V-3120 #1746352.

$1995

HITACHI

50Mhz OSCILLOSCOPE

With Single Time Base and High Resolution CRT. The usefullness of Hitachi scopes is extended to cover an array of new measurement applications.
2 channel • 6 inch screen
3 Year Warranty.

V-522
#1746248

$995

GoldStar

20MHz SCOPE W/BUILT-IN FUNCTION GENERATOR

1MHz Function Generator with three kinds of waveforms are available w/50ohm output and TTL Pulse. Two channels- single time base. Ideal for education applications. 1MHz fuction generator built-in this 20MHz, two channel scope. Sine, Square, Triangle and TTL Pulse output waveforms.

OS-9020G
#1734771

$469

S. M. S.

AUTOMOTIVE DIGITAL ENGINE ANALYZER

12 Instruments In One!

- RPM
- Dwell Angle
- Duty Cycle
- Temperature
- Frequency Counter
- Aud. Continuity Tester
- Tachometer
- DC Voltmeter
- AC Voltmeter
- OHM Meter
- DC Current
- AC Current

10 meg OHM impedance. Max/min Average Memory Record. Data hold. Auto Sleep and Power Off. 2 Year Warranty. Temp Probe. Alligator Test Leads. Inductive Pickup Included.

Model 105
#1929177

$269

BK PRECISION
MAXTEC INTERNATIONAL CORP.

2 MHz FUNCTION GENERATOR WITH DIGITAL DISPLAY

- Generates sine, triangle, square, pulse and ramp waveforms
- TTL Pulse and CMOS Pulse outputs
- Coarse and Fine Frequency Controls
- Variable amplitude output, plus 20dB step attenuator
- Four digit frequency counter display
- Variable DC offset, with on-off switch
- Variable duty cycle; CAL position for 50% duty cycle

MODEL
3011B
#1460267

$249

BK PRECISION
MAXTEC INTERNATIONAL CORP.

100MHz PORTABLE FREQUENCY COUNTER

5Hz to 100Mhz Range • 8 Digit LED Display selectable 1.0 Sec/0.1 Sec Gate Times
Low pass filter • Battery or AC Power Charger/AC adapter included

BK-1803B
#155339

$189

AMERICAN RELIANCE INC.

3.5 DIGIT DIGITAL MULTIMETER

W/AUTORANGING & 1 YEAR WARRANTY

Model 33 is a versatile digital multimeter with an impressive range of capabilities offered at an incredible price. This unit has data-hold functions and a basic accuracy of 0.5%, also audible continuity and fused 20A input.

FREE BOOT W/PURCHASE #1744648

Model 33
#1742347

$59.95

BK PRECISION
MAXTEC INTERNATIONAL CORP.

3.5 DIGIT TOOL KIT MULTIMETER

HOT!

- Measures voltage, resistance and current
- 0.5% DCV accuracy DC current to 10A
- Resistance, 0.1 to 20M
- Diode Test
- Drop resistant case

2703A
#1701403

$38.99

WAVE TRACKER™ NOISE AND SURGE FILTER

Waber's new "Wave Tracker" provides the ultimate in noise filtration and surge protection.

- Patented 3 Stage Protection (MOV, Gas Tube, Silicon Avalanche Diode)
- Exceeds ANSI/EEE C62.41-1980 (IEEE 587-1980)
- Audible and Visual Surge Indicators
- NEMA 5-15 Plug and Receptacles
- Lifetime Warranty
- Available in 4, 6 and 8 outlets

WT4 #1791628

SL WABER

$59.95

Home of Fast, Friendly, Courteous Service

Fry's ELECTRONICS

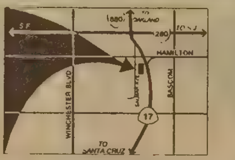
Prices Good Through September 13, 1994

Limit Rights Reserved
Not Responsible For
Typographical Errors

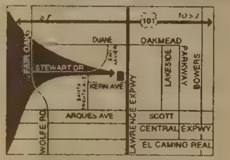
HOURS:
MON-FRI
8AM-9PM
SATURDAY
9AM-8PM
SUNDAY
9AM-7PM

VISA AND MASTERCARD ACCEPTED

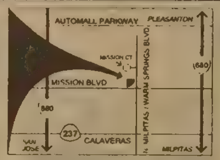
CORPORATE P.O. FAX #'s



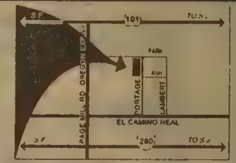
CAMPBELL
600 E Hamilton Ave.
(408) 364-3700
(408) 364-3595



SUNNYVALE
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



FREMONT
440 Mission Ct.
(510) 770-FRYS(3797)
(510) 770-3700



PALO ALTO
340 Portage Ave.
(415) 496-6000
(415) 496-6044

YOUR BEST COMPONENTS AND ACCESSORIES BUYS ARE ALWAYS AT FRY'S!

PANAVISE® PV Jr.

Turns, twists and rotates to hold just about anything!
#1917851

$19.99

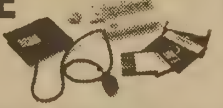
PERSONAL HUB MAGNUM H50

Four RJ45 User Ports and Uplink
#1909610

$295

BLOOD PRESSURE AND PULSE MONITOR W/COMPUTER INTERFACE

200M
IBM #1755848
MAC #1866865



$129.99

Pocket PCRef

POCKET PCRef

496 page Pocket PC reference book of hard to find information for IBM PCs and compatibles.
#1936029

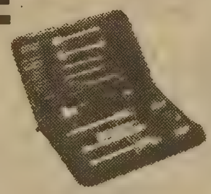
$13.99

AIR BLAST PRESSURIZED DUSTER

CFC FREE RITE-OFF
E626- 6 OZ.
#1719655

$3.99

COMPUTER SERVICE KIT



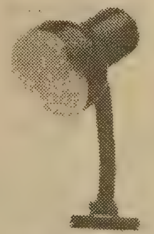
CA215L
#1780794

QVS

$9.99

GOOSENECK CLIP-ON LAMP

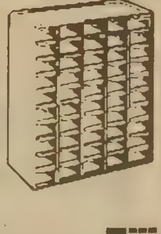
Height/Reach 12"
Uses 60 watt bulb (not included)
#1821949 BLK
#1821950 WHT



LITE SOURCE INC.

$6.99

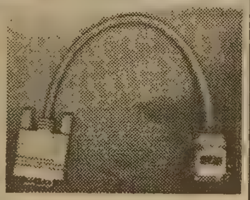
50 DRAWER STORAGE CABINET



Model 10-350 #1541399 AKRO-MILS

$9.99

MAC VIDEO CABLE



Use almost any PC monitor on your MAC.

$27.99

4691V
#1800584

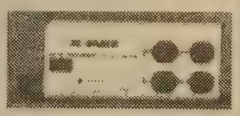
MicroApps PERMANENT POWER PACK

PREVENT PC FAILURE DUE TO A DEAD BATTERY
PPP-001
#1660638

$32.95

SL WABER WAVE TRACKER NOISE AND SURGE FILTER

WT4
#1791628



$59.95

THERMOELECTRIC COOLING MODULE

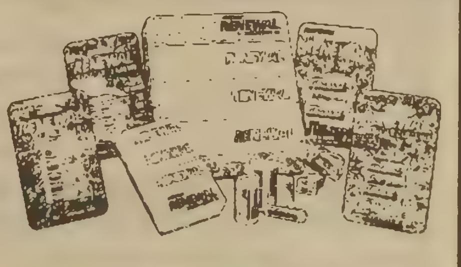
- Advanced Technology for cooling CPUs; including Pentium.
- Active cold module combined with heat sink and fan.
- Reduces Pentium temperature up to 54%.

#1908099

E Cool

$59.95

RAYOVAC's RENEWAL® REUSABLE ALKALINE™



INTRODUCING THE BEST PERFORMING BATTERY SYSTEM IN ALL OF CREATION!

Renewal is a breakthrough technology that gives you long-life alkaline power not just once but time after time. The Renewal Power Station is NO ORDINARY BATTERY CHARGE! Built-in computer microchip technology monitors and charges each Renewal battery individually to maximize performance on every charge. Made in the U.S.A.

4-PACK AA CELLS $5.39
715-4 #1850899

2-PACK C CELLS $4.89
714-2 #1850888

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

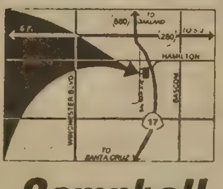
Fry's ELECTRONICS

Prices Good Through September 13, 1994

Limit Rights Reserved. Not Responsible for Typographical Errors.

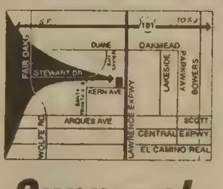
STORE HOURS
MON - FRI
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

CORPORATE P.O. FAX #



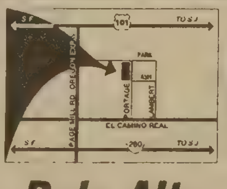
S.F.
880 TO OAKLAND
280
TO S.J.
HAMILTON
WINCHESTER BLVD
BASCOM
17
TO SANTA CRUZ

Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



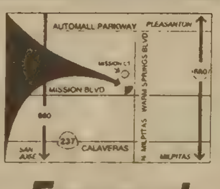
S.F.
101
TO S.J.
FAIR OAKS
DUANE
OAKMEAD
STEWART DR
KERN AVE
LAKESIDE
PARKWAY
BOWERS
ARQUES AVE
WOLFE RD
LAWRENCE EXPWY
SCOTT
CENTRAL EXPWY
EL CAMINO REAL

Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



S.F.
101
TO S.J.
PARK
PAGE MILL RD OREGON EXPY
PORTAGE
ASH
LAMBERT
EL CAMINO REAL
280

Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044



AUTOMALL PARKWAY
PLEASANTON
MISSION CT
MISSION BLVD
WARM SPRINGS BLVD
680
880
237
CALAVERAS
SAN JOSE
N. MILPITAS
MILPITAS

Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard
VISA AND MASTERCARD ACCEPTED

Calendar Of Events

Conferences, Shows, Special Events

August

August 27 California Computer Show. Cow Palace, San Francisco. Robert Austin Corp. Call: 1-800-346-0100.

August 27 Computer Products Show And Sale. Solano County Fairgrounds, Vallejo. MarketPro. Call: (707)645-3033.

August 28 Computer Products Show And Sale. Marin Civic Center, San Rafael. MarketPro. Call: (707)645-3033.

September

September 4 Computer, Ham Radio, Electronics Swap Meet. Las Positas College, Livermore. Livermore Amateur Radio Club. Call: (510)783-2803 days, 447-3857 eves.

September 7–9 Windows Solutions Conference And Expo. Moscone Center, San Francisco. ZD Expos. Call: 1-800-488-2883.

September 10 Computer Products Show And Sale. Sonoma County Fairgrounds, Santa Rosa. MarketPro. Call: (707)645-3033.

September 11 California Computer Show. Santa Clara County Fairgrounds. Robert Austin Corp. Call: 1-800-346-0100.

September 13–15 Online Developers Conference. San Francisco. Jupiter Communications. Call: (212)941-9252.

September 13–16 Seybold San Francisco Conference And Expo. San Francisco. ZD Expos. Call: 1-800-488-2883.

September 14–16 COMPUEXPO '94. San Jose Convention Center. Miller Freeman, Inc. Call: Marcia Gulino, (415)905-2354.

September 17 California Computer Show. Oakland Coliseum. Robert Austin Corp. Call: 1-800-346-0100.

September 17 Computer Marketplace. San Mateo County Expo Center. National Productions. Call: (408)778-5200.

AUGUST 20, 27 & SEPTEMBER 11, 17

COMPUTER SHOW & SALE

VARIOUS LOCATIONS

Robert Austin presents the Computer Show & Sale. Over 40,000 sq. ft. of computer products will be on sale. Super low discount prices are available on everything from complete computers to system upgrades. Shop for bargains on software, CD-ROMs, hard drives, accessories, and more. Find products you will never see in a superstore. The August 20 and September 11 (Sunday) shows are at the Santa Clara County Fairgrounds, the August 27 show is at the Cow Palace in San Francisco, and the September 17 show is at the Oakland Coliseum. Shows run from 10 am to 4 pm. Call 1-800-346-0100 for more information.

SEPTEMBER 13–16

SEYBOLD SAN FRANCISCO

MOSCONE CENTER, SAN FRANCISCO

This year's Seybold San Francisco Conference and Expo will feature a three-day Main Conference with top-level visionaries whose ideas are redefining the industry and setting the trends; specialized conference tracks featuring experts discussing the latest products and applications, such as digital photography, workflow managers, and electronic delivery systems; and twenty-two technology sessions on topics from color theory and PostScript troubleshooting to desktop video production and publishing on the Internet. New this year is an intensive two-day Quark Professional Symposium, with the latest features and products, expert training, and insider tips and tricks. The exposition will feature over 350 exhibitors from the publishing, graphics, and communications industries. Call Seybold Seminars, 1-800-488-2883.

SEPTEMBER 13–15

ONLINE DEVELOPERS CONFERENCE

PARC FIFTY FIVE HOTEL, SAN FRANCISCO

Jupiter Communications is presenting the first annual Online Developers Conference to help developers build and promote an efficient, compelling, and profitable online application, and to access potential markets. Attendees will meet key development people from the major commercial online services; network with executives from telcos, investment banks, publishers, and digital Hollywood; learn about the software tools required to develop applications; get information about typical contractual arrangements between commercial system operators and content providers; meet production talent who can help launch an interactive online product; and find out where and how to market products and services. Call Jupiter Communications, (212)941-9252.

Mentors In Schools Program Seeks Volunteers

The CompuMentor Project is looking for volunteer "mentors"—skilled personal computer users who can help with desktop publishing and multimedia projects in San Francisco public schools. It also needs people who can do some hardware support: basic setup and troubleshooting. These projects will be mainly on DOS/Windows PCs.

Volunteers will work with students and staff to produce projects which will not only teach students computer skills, but expand their general communications abilities and self-confidence. This innovative program is an excellent way for the community to get involved in the schools, addressing the chronic shortages of resources, training, and support. Skilled people are needed to help make the best use of the donated equipment which the rapid pace of technological evolution has made available.

The Schools project is getting set up to start work during the school year. It needs people who will be available at various times, and not all of the work will be during the school day. Time commitments can be flexible, but regular availability is preferable.

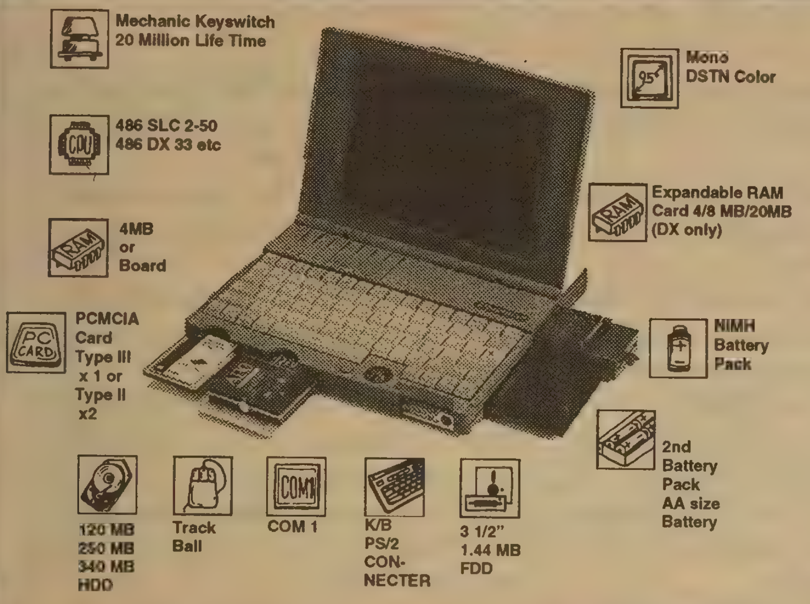
For more information, please contact CompuMentor at (415)512-7784.

89 Stillman St.
San Francisco, CA 94107
(415)512-7784
1-800-659-3579
fax 512-9629

Technoland

We Do Business Your Way!

(408) 992-0888


Mechanic Keyswitch 20 Million Life Time
486 SLC 2-50 486 DX 33 etc
4MB or Board
PCMCIA Card Type III x 1 or Type II x2
Mono DSTN Color
Expandable RAM Card 4/8 MB/20MB (DX only)
NIMH Battery Pack
2nd Battery Pack AA size Battery
120 MB 250 MB 340 MB HDD
Track Ball
COM 1
K/B PS/2 CONNECTER
3 1/2" 1.44 MB FDD

LAPRO Light-Weight

486 Color Notebook

- •Intel 486DX-33 MHz CPU
- •4 MB RAM Exp. To 20 MB
- •170 MB Hard Drive Exp To 540 MB
- •Dual Scan Color LCD Display, 9.5"
- •Internal 1.44 MB 3.5" Floppy Drive
- •Built-In Trackball
- •PCMCIA III Slot
- •2 Serial, 1 Parallel, 1 Ext. VGA, 1 Ext KB
- •HiMH Rechargable Battery
- •Intelligent Power Management System
- •Carrying Bag & AC Adapter
- •Weight 4.2 Lbs (With Battery)

$1895

MONTHLY SYSTEM SPECIALS

486DX2-66

Green Multimedia System

- •Intel 486DX2-66 MHz CPU
- •SIS CHIP-SET w/GREEN FUNCTIONS
- •4 MB RAM EXP TO 48 MB
- •S3 VESA LB SVGA CARD w/1 MB Exp To 2MB w/DOS & WINDOWS GUI ACCELERATOR
- •FAST VLB IDE CARD w/2S, 1 P PORTS
- •TEAC 1.2 MB & 1.44 MB FLOPPY DRIVES
- •MINI TOWER CASE w/230W UL P.S.
- •CONNER 420 MB IDE HARD DRIVE
- •Green 14" SVGA 1024x768 .28mm Non-Interlaced Monitor
- •101 Enhanced Keyboard
- •Serial Mouse
- •Mitsumi Double Speed CD-ROM DRIVE
- •16-Bit SOUND CARD w/STEREO SPEAKERS w/ COMPTONS ENCYCLOPEDIA
- •MD DOS 6.2 & WINDOWS 3.11

$1488

PENTIUM 90 MHz

PCI/VLB System

- •Intel Pentium 90 MHz CPU
- •256K CACHE Exp. To 512KB
- •8 MB RAM EXP TO 128 MB
- •ADAPTEC 2842 VLB SCSI CARD
- •TEAC 1.2 MB & 1.44 MB FLOPPY DRIVE
- •540 MB SCSI-II HARD DRIVE
- •S3 VESA LB SVGA CARD w/1 MB EXP TO 2MB w/DOS AND WINDOWS GUI ACCELERATOR
- •15" Green 1280x1024 SVGA Non-Interlaced `Monitor
- •Mid-Tower Case w/230W UL P.S.
- •101 Enhanced Keyboard
- •Serial Mouse
- •MS DOS 6.2 & WINDOWS 3.11
- •Made In USA Pentium PCI/VLB MB

$2598

CALL FOR OTHER CONFIGURATIONS

GREEN 486 VLB MOTHERBOARD

Supports:
Intel/AMD 486SX/DX/DX2 CPUs • Intel SLE 486SX/DX/DX2/DX4 CPUs
Cyrix CX486SX/DX/DX2 CPUs • Intel P24D/P24T CPUs

- •"True Green" with Power Management
- •SIS471 ChipSet
- •Award BIOS
- •256K Cache Expandable To 1 MB
- •Memory Expandable to 128 MB (with Four 30-pin & Two 72-pin SIMM Sockets)
- •Three 32-bit VESA Slots & Seven 16-bit ISA I/O Slots
- **•P24T ZIF Socket**

$95

S3 805-P VLB SVGA WINDOWS ACCELERATOR CARD

- •High Performance S3 86C805-P Chip
- •32-bit VESA Local Bus
- •1 MB Display Memory Expandable to 2 MB
- •DRAM-Based Accelerator To Speed Up Windows, OS/2, AutoCAD, etc.
- •High Resolutions Support Up To 1280x1024
  - -1280x1025 @ 256 Colors -1024x768 @ 64K Colors
  - -800x600 @ 64K Colors -640x480 @ True Colors
- •No-Wait-State ISA & Local Bus Cycle

$88

PUT YOUR COMPUTER SCREEN ON TV!

Perfect For:

- •Business Presentations
- •Classrooms Presentations
- •Laptop Users
- •Playing Games On Big Screen
- •Computer Based Training
- •Pocket Size Adapte
- •Converts VGA Signals to NTSC Format
- •Recordable Through VCR
- •Includes: Software Driver, 120V DC Power Adapter, User's Manual, RCA Video Cable

WINDOWS VERSION $199

Only $89

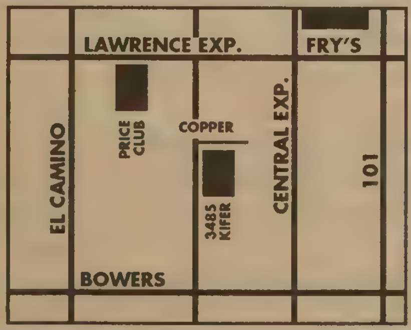
Demo in Store

No Surcharges for Credit Card Purchases

No **Annoying Voice Mail Answering Machines**

Yes We Gladly Accept P.O.'s From Corp., Educ. and Government Accounts

Yes **We Will MEET or BEAT ANY ADVERTISED PRICE!**


LAWRENCE EXP.
FRY'S
PRICE CLUB
COPPER
EL CAMINO
3485 KIFER
CENTRAL EXP.
101
BOWERS

COME SEE OUR SHOWROOM!

1 Block Away From Price Club At The Intersection of Kifer and Copper
3485 KIFER ROAD SANTA CLARA, CA 95051

TEL: (408) 992-0888

VISA **FAX: (408) 992-0808** MasterCard

MON-FRI 9 AM-6 PM/SAT 10 AM-5 PM

Prices subject to change w/o notice, not responsible for typographic errors

September 18 Computer Products Show And Sale. Scottish Rite Center, Sacramento. MarketPro. Call: (707)645-3033.

September 19–22 Thirteenth Annual American Voice Input/Output Society Conference. San Jose. American Voice Input/Output Society. Call: (408)248-1353.

September 19–23 LISA VIII USENIX System Administration Conference. San Diego. USENIX and SAGE. Call: (714)588-8649 or conference@usenix.org.

September 20–23 Embedded Systems Conference. Santa Clara. Miller Freeman, Inc. Call: (415)905-2354.

September 24–25 Computer Products Show And Sale. Solano County Fairgrounds, Vallejo. MarketPro. Call: (707)645-3033.

October

October 2 Computer, Ham Radio, Electronics Swap Meet. Las Positas College, Livermore. Livermore Amateur Radio Club. Call: (510)783-2803 days, 447-3857 eves.

October 10–13 International Display Research Conference. Monterey. Society for Information Display. Call: Ralph Nadell, Palisades Institute for Research Services, (212)620-3341.

October 11–13 Multimedia Expo. San Francisco. Smith and Smith. Call: (212)226-4141.

October 14–18 C++ World Conference. San Jose. Smith and Smith. Call: (212)274-0640.

October 17–19 Tech Decisions '94 Conference And Expo. San Jose Convention Center. CMP Trade Show & Conference Services. Call: (516)733-6827.

October 18 Perspectives On The Information Technology Market In Education Conference. San Francisco. CCA Consulting. Call: (617)237-8950.

October 24–26 National Human Resources Information Technology Exposition And Conference. San Jose. Blenheim NDN, Inc. Call: 1-800-232-3976.

October 25–26 Geoworks Technology Summit '94. Burlingame. Geoworks. Call: 1-800-524-1857 ext. 1214.

Classes, Seminars, Workshops

August

August 20 External Referencing & Paper Space Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

August 20 & 27 PC Repair Two-Day Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

August 20–21, 27–28 Hi-8 To QuickTime Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

August 22 dBASE IV Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 22 Excel 5.0 Charts Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 22 QuarkXPress For Windows Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 22 WordPerfect/DOS Level II Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 22–23 Networking The Macintosh Seminar. San Jose. Data-Tech Institute. Call: (201)478-5400.

August 22–23 Professional 3D Tools And Techniques Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

August 22–24 RF Circuit Fundamentals Class. Los Altos. Besser Associates. Call: (415)949-3300.

August 22–25 Level II AutoCAD Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

August 22–27 Novell NetWare 801 Service And Support Class. Oakland. MIS Services, Inc. Call: (510)208-5700.

August 22–29 Basic CorelDRAW 4.0 Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

August 22–30 QuarkXPress For Graphic Production: Advanced Class. Santa Clara. UC Santa Cruz Extension. Call: (408)427-6620.

August 23 Carpal Tunnel Syndrome: Causes, Cures, And Prevention Workshop. San Francisco. Urban Injury Prevention. Call: (415)982-4477.

August 23 Intermediate Excel For Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 23 Paradox 4.5 For DOS/Windows Level 3 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 23 UnixWare For DOS Users Seminar. San Francisco. Network Services Group. Call: (510)538-2630 or (415)863-8407.

August 23 Using Internet In Business Workshop. San Francisco. San Francisco Business Computers. Call: (415)788-5338.

August 23 WordPerfect/Windows Level II Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 23–24 The Macintosh Survival Course. Sacramento. Data-Tech Institute. Call: (201)478-5400.

August 23 & 25 Beginning Excel Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 23 & 25 Beginning Persuasion Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 24 Advanced FileMaker Pro Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 24 Art 314: Graphic Arts On The Macintosh Class. Redwood City. Cañada College. Call: (415)330-3336.

August 24 Free Multimedia Studies Program Information Session. San Francisco. SFSU Extended Education. Call: (415)904-7700.

August 24 Intermediate Lotus Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 24 Word For Windows 6.0 Level 3 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 24–September 7 Aldus PageMaker Class. San Francisco. Center for Electronic Art. Call: (415)956-6500.

August 25 Access 2.0 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 25 Excel 5.0 Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 25 Intermediate WordPerfect For Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 25 Intro To WordPerfect For Windows 5.2 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

August 25–26 Client-Server Computing Class. San Francisco. UC Berkeley Extension. Call: (510)642-4111.

August 25–26 Network Fundamentals Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

August 25–26 Professional Generic CADD 6.1 Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

August 25–26 Statistical Design Techniques For High-Yield Manufacturing Class. Los Altos. Besser Associates. Call: (415)949-3300.

August 25–26 Surface Modeling & Render-

THE BEST WARRANTY IN THE WORLD
Only at Pars—The Quality Leader

3 YEARS PARTS LIFETIME LABOR

WE'VE EXPANDED TO SERVE YOU BETTER
VISIT OUR NEW 6000 SQ. FT. SHOWROOM
OVER 3000 ITEMS IN STOCK!

486SX/ DX MULTIMEDIA SYSTEMS

- Intel 486SX/DX Processor
- 8MB RAM Expandable
- 256K SRAM Cache
- 1.44MB Floppy Drive
- 420MB IDE Hard Drive
- VESA Local Bus IDE Controller
- AT I/O Card 2S, 1P and 1G Ports
- 32 Bit VESA Local Bus SVGA Card w/1MB RAM
- 14" Color Monitor, 1024x768, .28dp
- 101 Enhanced Keyboard
- Mid Tower Case w/230W PS
- Serial Mouse w/Mouse Pad
- Sony CDU-33A Internal CD-ROM Dual Speed
- Media Vision or Sound Blaster 16-MCD
- Pair of AMP Speakers
- 5 CD Software Titles Included

486-50MHz	486DX2 66MHz	486DX4 100MHz
Multimedia System w/4MB, 210HD	Multimedia System	Multimedia System
$1299	$1749	$2099

INCREDIBLE OFFER!

NOVELL
Hands-on Training
Learn from an expert
CNA - CNE
Quality Training
Seats are limited Call!
$199

Intel Pentium 100/ 90MHz

Multi-Processor Systems Available

P-5 PROCESSOR 512K CACHE

- PCI/ISA 64 Bit Motherboard
- Triple The Bus Motherboard Included
- 8MB 70ns RAM
- 420MB Fast Disk Drive
- 1.44MB Floppy
- 14" SVGA Non-Interlaced Full Screen
- PCI 2MB 64 Bit Card
- Med Tower Case 250 Watt
- 101 Enhanced non-spill Keyboard

$2195

3 YEARS PARTS LIFETIME LABOR

Intel Pentium 66/ 60MHz

P-5 PROCESSOR 512K CACHE

- PCI/ISA 64 Bit Motherboard
- Triple The Bus Motherboard Optional
- 8MB 70ns RAM
- 420MB Fast Disk Drive
- 1.44MB Floppy
- 14" SVGA Non-Interlaced Full Screen
- PCI 2MB 64 Bit Card
- Med Tower Case 250 Watt
- 101 Enhanced non-spill Keyboard

$1995

3 YEARS PARTS LIFETIME LABOR

AWARD WINNING MULTI MEDIA PACKAGES

DOUBLE SPEED MITSUMI/ SONY CD ROM

- Media Vision 16-Bit Sound Card
- Speakers and FREE CD Titles

$279

PC MAGAZINE EDITORS' CHOICE

486-50MHz

- AMI BIOS
- 4MB 70ns RAM
- 1.2MB Floppy
- 1.44MB Floppy
- IDE IO 2FD/2HD/2S/1P/1G
- Fast 210MB Western Digital HD
- Trident Super VGA Card w/1MB w/Windows Acc.
- Super VGA Monitor Full Screen
- $880 Free PARS bundled Software
- Mini Tower Case
- 101 Enhanced Keyboard

3 YEARS PARTS LIFETIME LABOR

$999
ONLY $26 A MONTH

486-66MHz

- VESA Local Bus—128K Cache
- 4MB 70ns RAM
- 1.2MB Floppy
- 1.44MB Floppy
- IDE IO 2FD/2HD/2S/1P/1G
- Fast 340MB Western Digital HD
- Trident Super VGA Card w/1MB w/Windows Acc.
- Super VGA Monitor Full Screen
- $880 Free PARS bundled Software
- Mini Tower Case
- 101 Enhanced Keyboard

3 YEARS PARTS LIFETIME LABOR

$1249
ONLY $32 A MONTH

Award Winning Support

UNIX NOVELL
Windows NT SOLARIS
SCO SPARC
SUN NEXT STEP

Our Award Winning Staff Specializes in UNIX System Integration & Networking.

NOVELL. SCO AUTHORIZED RESELLER

FOR MULTIMEDIA SYSTEMS WITH CD, SPEAKERS, TITLES & MORE ADD $239

Easy Financing Up To 3 Years! No payment for 90 Days in Only 5 Minutes

HARD DRIVE

Western Digital 210MB	$169
Western Digital 420MB	205
Western Digital 540MB	299
1GB SCSI Seagate	595
2GB SCSI Seagate	1129

CALL FOR SCSI AND MORE

CD-ROM

TOSHIBA	$245
CHICCON 470K	245

14.4 FAX Modem $59

TAPE BACKUP

250MB COLORADO	$149
250MB CONNER	149
Tape Dat CONNER 2GB	789

VIDEO CARDS

VIPER 2MB VRAMPCI/VESA	$299
Diamond Stealth 4MB VRAM PCI	429
Diamond Viper 2MB VRAM PCI/VESA	299

PRINTER

HP All Models	CALL

MEMORY

1MBx9-70NS	$36
4MBx9-70NS	149
16MBx9-70NS	580

PARS
INTERNATIONAL COMPUTER
Now in our 5th Year!

MasterCard VISA

510/ 733-0103
FAX: 510/ 733-0206
22441 Foothill Blvd. • Hayward, CA

OAKLAND
N
238
580
A Street
Foothill Blvd.
880
92
S
SAN JOSE

DALLAS, TX
214-902-8386

MIAMI, FL
305-531-5878

ATLANTA, GA
404-391-0205

CORP., GOVT., & EDUCATIONAL P.O.'S WELCOME. DEALER INQUIRIES WELCOME. OFFER EXPIRES 9/25/94.
Prices reflect a cash or check discount. Availability & prices are subject to change without prior notice. Not responsible for typographical errors.

ing Workshop. Santa Clara. The Copper Connection. Call; (408)970-9838.

August 25–September 29 Intro To QuickTime And Digital Video Editing Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

August 26 Intermediate Excel For Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 26 Intro To Excel Class. San Jose. InfoMind. Call: (408)243-1121.

August 26 Intro To Lotus For Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 26 Intro To PageMaker 5.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

August 26 Macintosh Network Administration Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 26 WordPerfect 6.0 For Windows Level 3 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 26 & 29 Project 4.0 Level 1 & 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 27 Internet Seminar. San Francisco. Interactive Dimensions. Call: (415)552-3859.

August 27 Intro To Word Class. San Jose. InfoMind. Call: (408)243-1121.

August 27 Overview Of Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

August 27, September 10 & 17 Getting Started With MacroMedia Director Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

August 28 Intro To WordPerfect Class. San Jose. InfoMind. Call: (408)243-1121.

August 29 Advanced Technologies Workshop And Open House. Oakland. Merritt College Computer Information Systems. Call: (510)436-2453.

August 29 Applied Functional Analysis I Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 29 Illustrator For Windows Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 29 Informix 4GL Class. Pleasanton. AT&T Technical Education Center. Call: 1-800-TRAINER, prompt 1, ext. 6564.

August 29 Intermediate Paradox For Windows 1.0/4.5 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

August 29 Intro To Windows Class. San Jose. InfoMind. Call: (408)243-1121.

August 29 Join The Information Superhighway: Intro To The Internet Seminar. Oakland. Merritt College Computer Information Systems. Call: (510)436-2453.

August 29 Matrix Theory I Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 29 Network Analysis I Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 29 & 31 Intro To Project For Windows 4.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

August 29–September 2 Wireless System Design Class. Los Altos. Besser Associates. Call: (415)949-3300.

August 29 & September 12 Mac Basics For Multimedia I Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

August 29–October 24 Intro To Applied Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

August 30 Automatic Control I Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 30 Fox Pro 2.5 For DOS/Windows Level 3 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 30 Intermediate DOS 6.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

August 30 Intro To PowerPoint For Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 30 Network Administration For Receptionists And Other Support Professionals Seminar. San Francisco. Network Services Group. Call: (510)538-2630 or (415)863-8407.

August 30 Network Administration Seminar. Oakland. Merritt College Computer Information Systems. Call: (510)436-2453.

August 30 Novell's UnixWare O/S, PDC's MAGIC Point Of Sale Software, And Specialix's Communication Hardware Seminar. San Francisco. Novell, Inc. Call: 1-800-892-2922.

August 30 Object-Oriented Programming With C++ Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 30 PageMaker For Windows Level II Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 30 UNIX And X-Windows Class. Oakland. Merritt College. Call: (510)436-2453.

August 30–31 PC Repair Two-Day Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

August 30–31 Visual Basic Level II Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

August 30–September 2 CAD/CAM With AutoSurf & AutoMILL Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

August 30–September 6 Painter 2 Class. San Francisco. Center for Electronic Art. Call: (415)956-6500.

August 31 Access 2.0 Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 31 Applied Graph Theory Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 31 Applied Mathematics Methods

Save Time And $$ At MarketPro Shows
The COMPUTER Products SUPERSTORE Show & Sale At Your Door
Hours 10-5pm
Sat. Aug. 27 - VALLEJO
Solano Co. Fairgrounds
Sun. Aug. 28 - SAN RAFAEL
Marin Civic Center
Sat. Sept. 10 - SANTA ROSA
Sonoma Co. Fairgrounds
Sun. Sept. 11 - FRESNO
Holiday Inn
Sun. Sept. 18 - SACRAMENTO
Scottish Rite Center
$1 OFF Admission With AD Regular Adm. $6
NEW Hardware • Software • Peripherals • Accessories • CD ROMs
Admission $6 • FREE With Membership • For Other locations (415)456-6730
SAVE UP TO 90% ON ALL Your Computer Needs!

Tell Them You saw it in MICROTIMES

Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 31 Computer Architecture Class. Santa Clara. International Technological University. Call: (408)727-1000.

August 31 Excel 5.0 Macros Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

August 31 Getting Started With UNIX Seminar. Oakland. Merritt College Computer Information Systems. Call: (510)436-2453.

August 31 Intermediate Word For Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

August 31 Special Topics In Electrical Engineering Class. Santa Clara. International Technological University. Call: (408)727-1000.

September

September 1 Computer-Aided Simulation Of Electronic Circuits Class. Santa Clara. International Technological University. Call: (408)727-1000.

September 1 Excel 5.0 Charts Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 1 Getting Started With X-Windows Seminar. Oakland. Merritt College Computer Information Systems. Call: (510)436-2453.

September 1 Intro To Access/Paradox Class. San Jose. InfoMind. Call: (408)243-1121.

September 1 Intro To Ami Pro 3.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 1 Intro To Windows 3.1 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 1 PageMaker For Windows Level I Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 1–2 Fundamentals Of AutoCAD/PC Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 1–9 Advanced Photoshop Workshop. Santa Clara. UC Santa Cruz Extension. Call: (408)427-6620.

September 1–November 3 Instructional Design For Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 1–November 3 Intermediate Interface Design: Designing Original Interfaces For Multimedia Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 2 Applied Classical Physics Class. Santa Clara. International Technological University. Call: (408)727-1000.

September 2 Digital Design I Class. Santa Clara. International Technological University. Call: (408)727-1000.

September 2 Intro To Microsoft Access For Windows 2.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 2 Intro To Word For Windows 2.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 2 Intro To Word For Windows 6.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 2 Probability Class. Santa Clara. International Technological University. Call: (408)727-1000.

September 2 QuarkXPress For Windows Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 2 Quattro Pro/Windows Level I Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 3 CNE Hands-On Study Group. Oakland. Excel Micro Solutions. Call: (510)836-2040.

September 3 Intro To Excel/Lotus/Quattro Pro Class. San Jose. InfoMind. Call: (408)243-1121.

September 4 Intro To Access/FileMaker Pro/Paradox Class. San Jose. InfoMind. Call: (408)243-1121.

September 6 Carpal Tunnel Syndrome: Causes, Cures, And Prevention Workshop. San Francisco. Urban Injury Prevention. Call: (415)982-4477.

September 6 Intermediate Object PAL Programming Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 6 Intermediate WordPerfect 5.1 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 6 Intro To Lotus 1-2-3 3.4 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 6 Intro To Microsoft PowerPoint 4.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 6–7 Beginning Photoshop Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 6 & 8 Beginning Persuasion Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 6 & 8 Beginning PowerPoint Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 6 & 8 Beginning QuarkXPress Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 6–8 Intro To Photoshop Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 6–9 Intro To AutoCAD Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 7 Free AutoCAD Program Info Session. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 7 Free Microsoft Training Program Info Session. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 7 Free Multimedia Studies Program Information Session. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 7 IBM PC Clone Hands-On Hardware Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

September 7 Intro To Paradox 4.0/4.5 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 7 Paradox 4.5 For DOS/Windows Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 7 Quattro Pro 5.0 For DOS/Windows Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 7 Word For Windows Level I Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 7–8 Troubleshooting And Maintaining The IBM PC And Compatibles Seminar. Sacramento. Data-Tech Institute. Call: (201)478-5400.

September 7–8 What, Why, How Is A LAN? Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

September 7 & 9 Intro To Corel Draw 4.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 8 Intro To ACT/Sharkware Class. San Jose. InfoMind. Call: (408)243-1121.

September 8 Intro To DOS Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

September 8 Intro To Microsoft Excel 5.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 8 Intro To Quattro Pro 5.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 8 Intro To SQL—Fundamentals Of Querying Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 8 Intro To Windows 3.1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

Resources

September 8 Intro To Windows Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

September 8 TeleMagic For Windows Free Workshop. San Francisco. J.C. Lukrich & Co. Call: (415)905-6900.

September 8 WordPerfect 6.0 For DOS Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 8–9 Network Fundamentals Hands-On Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

September 8–November 10 Graphics And Interface Design For Multimedia On The IBM-PC Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 9 Computers For Dummies Seminar. Richmond. Network Computing. Call: (510)235-9766.

September 9 Fox Pro 2.5 For DOS/Windows Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 9 Intro To cc:Mail For Windows 2.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 9 Intro To Lotus Approach 2.1 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 9 Intro To MS-DOS 6.2 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 9 Microsoft Excel For Windows Level I Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 9 Navigating The Internet Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

September 9 Networking For Dummies Seminar. Richmond. Network Computing. Call: (510)235-9766.

September 9 & 16 Interactive Microsoft Access Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 10 Computer Basics And Keyboarding Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

September 10 Internet Seminar. San Francisco. Interactive Dimensions. Call: (415)552-3859.

September 10 Rendering With AutoVision Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

September 10–11 CoSA After Effects: Digital Effects And Layering On The Desktop Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

September 10–11 Hands-On Video Toaster Class. San Francisco. Bay Area Video Coalition. Call: (415)861-3282.

September 11 Intermediate QuickBooks/Quicken Class. San Jose. InfoMind. Call: (408)243-1121.

September 12 C++ For Non-C Programmers Class. Pleasanton. AT&T Technical Education Center. Call: 1-800-TRAINER, prompt 1, ext. 6564.

September 12 dBASE IV Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 12 IBM PC Clone Hands-On Hardware Class. Oakland. Excel Micro Solutions. Call: (510)836-2040.

September 12 Intro To Microsoft Excel 4.0 Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 12 Intro To WordPerfect Class. Walnut Creek. Computer Education Center. Call: (510)937-2566.

September 12 WordPerfect 6.0 For Windows Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 12–13 AutoCAD R12 Update Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

September 12–13 Intro To Microsoft Windows For New Users Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 12–13 MicroStation: Basic 2D Graphics Update Training Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 12–13 NetWare—Getting Started Seminar. San Francisco. Center for Advanced Professional Development. Call: (714)261-0240.

September 12–15 DB2 Advanced Development For Performance Seminar. San Francisco. DCI. Call: (508)470-3880.

September 12 & 19 Intro To Data Communications Networks Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 12–23 Interactive Multimedia Intensive Workshop. San Francisco. Center for Electronic Art. Call: (415)956-6500.

September 13 Intro To PowerPoint Class. San Jose. InfoMind. Call: (408)243-1121.

September 13 Lotus 1-2-3 For DOS/Windows Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 13 Paradox 4.5 For DOS/Windows Level 2 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 13 Word For Windows 6.0 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 13–14 Technical Support For Windows Class. Santa Clara. The Dublin Group. Call: 1-800-464-8344.

September 13 & 15 Beginning Excel Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 13 & 15 Beginning FileMaker Pro Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 13 & 15 Beginning PageMaker Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 13 & 15 Microsoft Excel For Windows Level I Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 13 & 15 PageMaker For Windows Level I Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

September 13–16 3D Studio Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

September 13–16 Level I AutoCAD Workshop. Santa Clara. The Copper Connection. Call: (408)970-9838.

September 13, 20 & 27 Mac 3D For Beginners Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 13–October 11 Intro To Authorware Professional Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 14 Excel 5.0 Level 1 Class. Emeryville. Northwest Computer Systems. Call: Cathy Day, (510)653-0808 ext. 209.

September 14 Graphics Presentation With PowerPoint Class. San Francisco. SFSU Extended Education. Call: (415)904-7700.

September 14 Intro To Ami Pro Class. San Jose. InfoMind. Call: (408)243-1121.

September 14 Intro To WordPerfect For Windows 6.0 Class. San Francisco. The Dublin Group. Call: 1-800-464-8344.

September 14 M*A*S 90 Accounting Software Training Class For Beginners. San Francisco. J.C. Lukrich & Co. Call: (415)905-6900.

September 14 M*A*S 90 Accounting Software Training Class For Intermediates. San Francisco. J.C. Lukrich & Co. Call: (415)905-6900.

September 14 Microsoft Excel For Windows Level II Class. San Francisco. Ciber Training Services. Call: (415)281-6100.

COMPUTER UPGRADE SUPERMARKET

We didn't get to where we are by pushing boxes...

Larry Adler, Vice President of Marketing, NCA Computer Products

My personal commitment to ur corporate customers:

Ve've tailored our Corporate Sales Department to meet the very lemanding needs of buyers and professionals of Corporate America. Iow you look depends on how well the suppliers you've chosen erform. We offer you a clear choice over the competition: Iere is why...

OR THE SERVICE:

Fast account approval and setup. Pre-approved accounts for all Fortune 000 companies, Government Branches, Universities and Educational nstitutions.
Hassle-free ordering (just ask for corporate sales department).
Professional and knowledgeable sales staff.
Same day pickup at our Will Call Window, with no waiting.
Same day shipping/delivery available.
Direct swap of RMAs on most items within the warranty period.
Our R&D facility is designed to produce the highest quality systems nd sub-systems, one or one thousand.
Personal service tailored to each Corporate Account by your own nside customer service representative.

OR THE PRICE:

We offer the most competitive prices in the industry.
Local support and service at mail-order prices.
Special discount on most items reserved only to open accounts.
For our corporate customers, we offer special programs that allow iscounts to their employees.

OR THE SELECTION:

We offer more options in memory storage devices (i.e. hard disk rives, CD Roms, tape backups, ...etc.) than any other store nationwide.
Full line of high-end video displays and cards.
High Quality systems and sub-systems customized to your needs and ecifications.

OR THE REPUTATION:

NCA is a local, national and worldwide supplier of the highest quality rand name computer products.
Well over 30% of the Fortune 1000 companies and hundreds of overnment and Educational Institutions around the country trust their usiness to NCA.
NCA's proven record of expansion is the result of superior service and ommitment to our customers.

NCACARES℠

OUR PERSONAL COMMITMENT TO CUSTOMER SATISFACTION

Comments, Suggestions, Ideas, Questions?

1-800-TELL-NCA

SERVICE AND PRODUCT SELECTION IS OUR PERSONAL COMMITMENT

IS WHAT SEPARATES NCA™ FROM THE REST!

THE LARGEST SELECTION OF HARD DRIVES AND MEMORY STORAGE DEVICES WORLDWIDE

◇

THE BEST BRAND NAME COMPUTER PRODUCTS IN THE INDUSTRY

◇

CORPORATE LEASING AVAILABLE

◇

THE MOST COMPETITIVE PRICES NATIONWIDE

◇

UNPARALLELED SERVICE AND COMMITMENT TO CUSTOMER SATISFACTION

HARD DRIVES • CD-ROMS • TAPE BACKUPS
• MULTIMEDIA • VIDEO CARDS • MONITORS • COMPUTER SYSTEMS
• MEMORY • CONTROLLER CARDS • PRINTERS
AND MUCH MUCH MORE...

NCA *CORPORATE*™

Dedicated to serving Purchasing Agents Worldwide.

1-800-961-1200

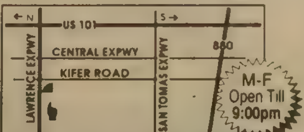
Local (408) 522-8672 FAX P.O.s (408) 739-2420

NCA Computer Products™

our Computer Upgrade SUPERMARKET™

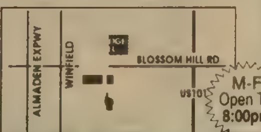
ISCOVER | AMERICAN EXPRESS | MasterCard | VISA | PURCHASE ORDERS

SUNNYVALE



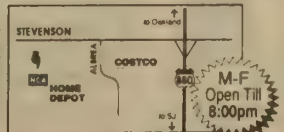
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9-8; Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

SAN JOSÉ



962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610

FREMONT



40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

MAIL ORDER DEPARTMENT
or
FREE CATALOG
(408)
522-3050

HIGH QUALITY COMPUTER SYSTEMS

ALEXIS SERIES
Compare QUALITY & VALUE

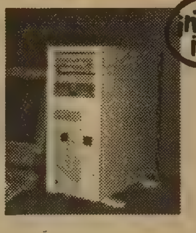
On March of 1993, We introduced our Alexis Series named after my first child, Alex. Since then, thousands of systems have been sold all over the world. Today, you can expect to find the same **Superior quality built** product that holds my child's name. It's what I expect from my employees towards my customers, products, and service, worthy to carry my son's name.

Tony G.
President

Customize to your needs...

With 34 Pages Of Options to Add On, You Will Have It Your Way.

ALEXIS 4VL



486DX/2-66MHZ /VLB TOWER SYSTEM

Featuring your choice:

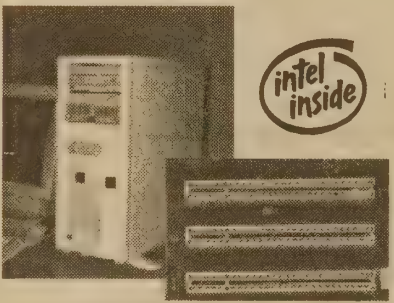
Genoa or TERMINATOR 4G DEEP GREEN

3 VESA LOCAL BUS SLOTS BOARD

Intel 486 Processor
High Quality Well Designed Case
Uses 30 Pin or 72 Pin Simms (Elite)
8 Slots Motherboard
3 VESA Local Bus Slots
ZIF Socket for Future Upgrade of CPU to Pentium Over Drive
128K Cache (to 256K)
TEAC Floppy Drive 1.2 or 1.44
101 Mitsumi Keyboard
VLB IDE Controller 2FD/2HD
I/O: 2 serial, 1 Parallel, 1 Game
250W UL Approved Power Supply
1 Year Warranty on Parts & Labor

$679

ALEXIS 400PCI

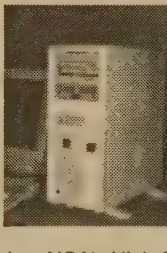


486DX/2-66MHZ /PCI TOWER SYSTEM

Three 32bit PCI Slots
Four 16bit ISA Slots
Intel PCI 486 Saturn Chipset
256K Cache (up to 512K)
Integrated NCR 53C810 32 bit PCI SCSI Controller.
Supports upto 10Mb/sec accros Fast SCSI bus
0MB Memory Upto 128MB
ZIF Socket for future upgrade
Integrated Hi-Speed Serial Ports/1Parl.
Teac 1.44M or 1.2M Floppy Drives
Heat Sink for CPU
Mitsumi High Quality Keyboard
NCA's Special 9-bay Tower Case
250W UL Power Supply

$789

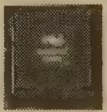
ALEXIS 560VL



Based on NCA's High Quality
Premier/VLB MotherBoard

PENTIUM 60MHZ /VLB TOWER SYSTEM

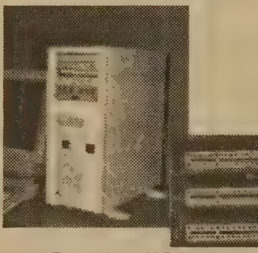
Two VLB Local Bus Slots
7 ISA Slots
Opti Chip Set
512K Cache
Intel Pentium 60MHz Processor
Integrated IDE port
VLB IDE Floppy Controller
I/O, 2 Serial/1 Parallel
Teac 1.44M and 1.2M Floppy Drives
Heat Fan for CPU
Mitsumi High Quality Keyboard
0Mb RAM up to 128MB (72Pin Simms)
NCA's Special 9bay Tower Case
250W UL Power Supply



$1239

66MHz add...$80

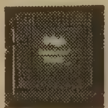
ALEXIS 560PCI



Based on NCA's High Quality
Premier/PCI MotherBoard
MADE IN IRELAND

PENTIUM 60MHZ /PCI TOWER SYSTEM

Itegrated SMC37C665 Super I/O Chip
Providing: Two FIFO Hi Speed Serial Ports/ 1 Parallel Port Bi-Directional
Three PCI Local Bus Slots Providing a high Bandwidth Data Path
Five ISA Slots (Includes 1 Shared ISA/PCI Slots)
Intel Mercury PCI Chip Set
256K Direct Mapping, write back second level Cache
Intel Pentium 66MHz Processor
Integrated PCI IDE port
Teac 1.44M and 1.2M Floppy Drives
Heat Sink for CPU
Mitsumi High Quality Keyboard
0Mb RAM up to 128MB (72Pin Simms)
NCA's Special 9bay Tower Case
250W UL Power Supply



$1349

66MHz add...$80

ALEXIS 590PCI

Based on NCA's High Quality
Premier/PCI MotherBoard
MADE IN IRELAND

PENTIUM 90MHZ /PCI TOWER SYSTEM

Itegrated SMC37C665 Super I/O Chip
Providing: Two FIFO Hi Speed Serial Ports/ 1 Parallel Port Bi-Directional
Three PCI Local Bus Slots Providing a high Bandwidth Data Path
Five ISA Slots (Includes 1 Shared ISA/PCI Slots)
Intel PCI Chip Set
256K Direct Mapping, write back second level Cache
Intel Pentium 90MHz Processor
Integrated PCI IDE port
Teac 1.44M and 1.2M Floppy Drives
Heat Sink for CPU
Mitsumi High Quality Keyboard
0Mb RAM up to 128MB (72Pin Simms)
NCA's Special 9bay Tower Case
250W UL Power Supply

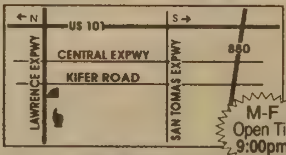
$1499

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

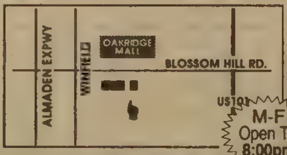
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

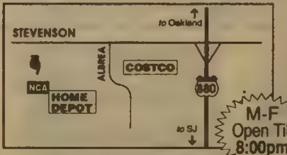
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATI

HIGH QUALITY COMPUTER SYSTEMS

Customize to your needs...

Introducing ALEXIS M *Series*

Featuring MYLEX *High-Performance Motherboards*

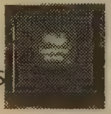
The ultimate in realiability & Performance

ALEXIS 4M

intel inside

486DX/2-66MHZ /VLB TOWER SYSTEM

Intel DX2/66 CPU
1 ISA 8-Bit/2 VESA Local Bus Slots
256K Cache exp. to 512K
0MB exp. to 64MB DRAM
Award BIOS
SIS Chip Set
ZIF Socket
Uses 4X30 Pin SIMMS or 2X72 Pin SIMMS
Green PC Energy Star Compliant
Teac 1.44M or 1.2M Floppy Drives
Mitsumi High Quality Keyboard
NCA's Special 9-bay Tower Case
250W UL Power Supply

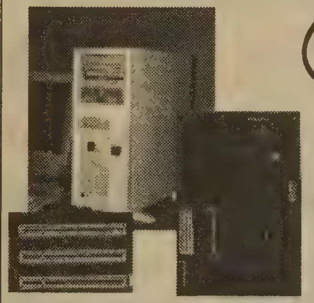


energy EPA POLLUTION PREVENTER

MYLEX

$699

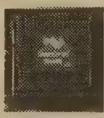
ALEXIS 4M-2



intel inside

486DX/2-66MHZ /PCI & VLB TOWER SYSTEM

Intel DX2/66MHz CPU
3 PCI Slots
4 ISA 16-Bit / 1 ISA 8-Bit
2 VESA Local Bus Slots
256K Cache
0MB exp. to 128MB DRAM
AMI BIOS
ALI Chip Set
ZIF Socket
Uses 72 Pin SIMMS
Green PC Energy Star Compliant
Teac 1.44M or 1.2M Floppy Drives
Mitsumi High Quality Keyboard
NCA's Special 9-bay Tower Case
250W UL Power Supply

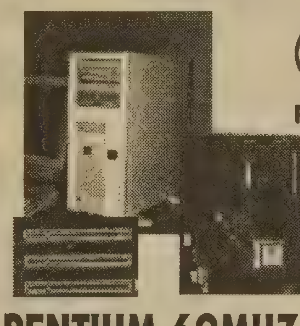


energy EPA POLLUTION PREVENTER

MYLEX

$739

ALEXIS 6M



intel inside pentium PROCESSOR

PENTIUM 60MHZ /PCI & EISA SUPER TOWER SYSTEM

Intel Pentium 60MHz CPU
7 EISA Slots
3 PCI Bus Master Slots
Fast SCSI-II On PCI Local PCI Slot
2 Serial, 1 Parallel & 1FDC
1 IDE Interface
256K Cache
0MB exp. to 192MB DRAM
AMI BIOS
Intel Mercury Chip Set
ZIF Socket
Uses 72 Pin SIMMS
Teac 1.44M or 1.2M Floppy Drives
Mitsumi High Quality Keyboard
NCA's Special Super Tower Case
250W UL Power Supply

IDEAL FOR SERVER!

MYLEX

$1599

66MHz add $80

American
Megatrends
The Highest Engineering & Reliability
MOTHERBOARDS

CALL FOR CUSTOM QUOTATIONS ON:

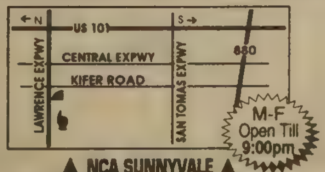
•EXCALIBUR PENTIUM•
•SUPER VOYAGER II•
•ENTERPRISE III•
•ENTERPRISE IV•

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

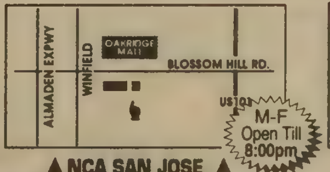
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

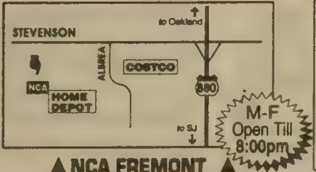
ICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA
CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

WEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

HARD DRIVES

MORE

Maxtor®

Lowest* Price Guaranteed

IDE

170MBIDE............. $189
7171A, 14ms, 1Yr. Warr.

245MBIDE............. $204
7245A, 14ms, 1Yr. Warr.

290MBIDE............. $210
7290A, 14ms, 1 Yr. Warr.

345MBIDE...... $219
7345A, 14ms, 2 Yr. Warr.

405MBIDE.......... $239
7405A, 14ms, 2 Yr. Warr.

540MBIDE.......... $339
MXT-540A, 8.5ms, 256K Cache, 2 Yr.Warr.

546MBIDE.......... $299
MXT-7546A, 12ms, 256K Cache, 2 Yr. Warr.

SCSI

External SCSI Drives Add $110

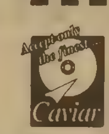
290MBSCSI................ $269
7290S, 14ms, 2 Year Warranty — External $379

345MBSCSI................ $289
7345S, 14ms, 64K Cache, 2 Yr. Warr. — External $399

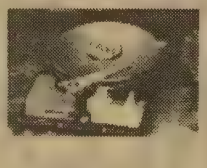
540MBSCSI...... $429
MXT-540S, 8.5ms, 256K Cache, 2 Year Warr. — External $539

1.2GBSCSI $1195
MXT-1240S, 8.5ms, 3.5" HH, 256K Cache, 2 Yr. Warr. — External $1315

WESTERN DIGITAL



Lowest* Price Guaranteed



340MB IDE $229
12MS. MODEL#WD2340, 3Yr. Warr.

420MB IDE $244
13MS. MODEL#WD2420, 3Yr. Warr.

540MB IDE $329
12MS. MODEL#WD2540, 3Yr. Warr.

700MB IDE $449
10MS. MODEL#WD2700, 3Yr. Warr.

1.0GB IDE $599
10MS. MODEL#WD31000A, 3Yr. Warr.

digital™

Digital Equipment Corporation

High End, High Capacity

Lowest* Price Guaranteed

1.6GB SCSI-II

While Supplies Last.

- DSP3160S
- 5400RPM
- 9.5ms
- 3.5" Drive

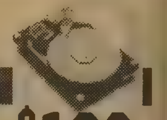
$899

External 1.6GB $999

Fast SCSI-II

CAPACITY	M/N	SIZE	RPM	SPEED	INTERNAL	EXTERNAL
1.0GB	3107L	3.5"X1"	5400	9ms	$799	$929
2.1GB	3210S	3.5"	5400	9.5ms	$1349	$1459
3.5GB	5350S	FH	5400	11.5ms	$1999	$2199
4.0GB	5400S	FH	5400	11ms	$2598	$2798

CONNER®



IDE

210MB IDE $168
14ms, CFA210

340MB IDE $215
13ms, CFA340A

420MB IDE $235
14ms, CFS420A LOW PROFILE 3.5" X1"

540MB IDE $299
<12ms, CFA540A LOW PROFILE 3.5" X1"

810MB IDE $529
<12ms, CFA810A LOW PROFILE 3.5" X1"

1.08GB IDE............ $589
<9.5 ms, CFA1080A

SCSI

	INTERNAL	EXTERNAL
340MB SCSI CP30340S, 256K,3.5"X1"	$299	$419
540MB SCSI CP30540S, 3.5"X1", 256K	$429	$539
1.0GB SCSI CFP1060S, 256K, <10MS, 3.5"X1"	$594	$699

IBM®

1.0GB FAST SCSI-II

LOW PROFILE 3.5"X1"

- 750,000 Hrs. MTBF
- 8.6ms Access Time
- 5400 RPM
- 512K Cache
- 5Yr. Warr.

INTERNAL $678

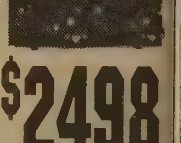
External $798

2.0GB FAST SCSI-II, 3.5", 8.6MS.......$1299

4GB Fast SCSI-II

5.25" FORMAT: CONTAINS TWO 3.5" HDAS

ADDRESSABLE AS ONE LUN



- Data Stripping Across Two Actuators
- 1MB Multi-Segmented, Dual Port Data Buffer
- <10ms Read Access Time
- 5400RPM
- Up to 10MB/Sec Transfer Rate (sync)
- 375,000 hous MTBF
- 5Yr. Warr.

External $2799

$2498

364MB IDE $239
12ms, IBM364AT

527MB IDE $369
12ms, IBM527AT

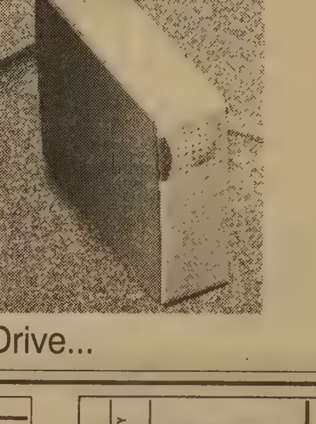
728MB IDE...................... $474
12ms, IBM728AT

QUALITY EXTERNAL SCSI & SCSI-II DRIVES

For MAC, SUN, NeXT, and IBM Compatibles

- High Quality Case
- 2 Centronics Output
- Noise-Free Fan
- External SCSI ID Switch
- External SCSI Cable (50C-50C or 50C-25C)
- Power Cable & Hardware
- Fully Tested & Approved
- Universal Power Supply 110/220V

Quality



See page 7 for a complete list of External Hard Drives, CD-ROM Drives, Tape Backup Drive...

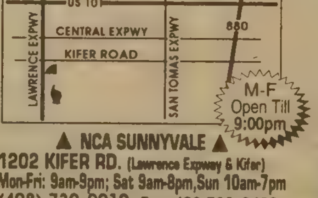
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

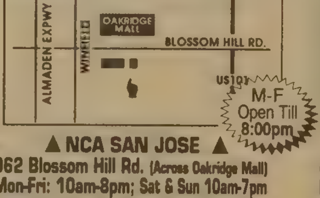
DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

Sale Ends 9/18/94

PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610

STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED* OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATI

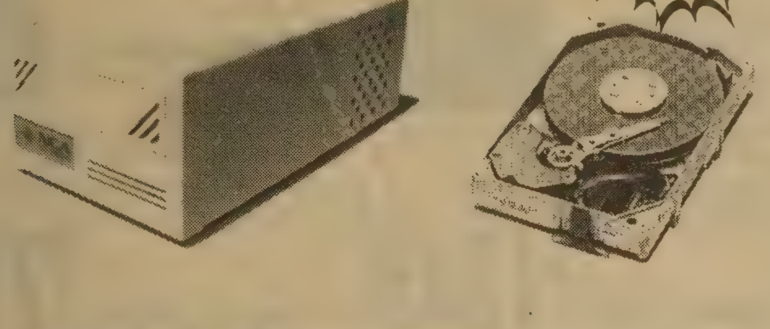
HARD DRIVES

MORE

Quantum®

Specify Quantum, Specify Quality

Lowest* Price Guaranteed



1.08GB FAST SCSI-III 3.5"X1"

1080S, 1.08GB Fast SCSI-III 3.5"X1"

NEW EMPIRE SERIES

$644

EXTERNAL $754

BRAND NEW WITH A TWO YEAR FACTORY WARRANTY · FIVE YEARS ON PD SERIES ONE YEAR ON 2.5" DRIVES

IDE

CAPACITY	M/N		SPEED	SIZE	PRICE
127MB	GLS127AT	FOR NOTEBOOKS	17ms	2.5"X17mm	$249
170MB	GLS170AT		17ms	2.5"X17mm	$279
256MB	GLS256AT		17ms	2.5"X19mm	$339
170MB	ELS170A	32K	17ms	3.5X1"	178
210MB	LPS210A	32K	17ms	3.5"X1"	$179
270MB	**LPS270A**	**128K**	**12ms**	**3.5X1"**	**$229**
340MB	**LPS340A**	**128K**	**Fast**	**3.5X1"**	**$249**
540MB	**LPS540AT**	**128K**	**12ms**	**3.5X1"**	**$314**

SCSI

CAPACITY	M/N		SPEED	SIZE	PRICE
160MB	GRS160S	FOR MAC POWERBOOKS	17ms	2.5" X17mm	$259
256MB	GLS256S		17ms	2.5"X19mm	$349

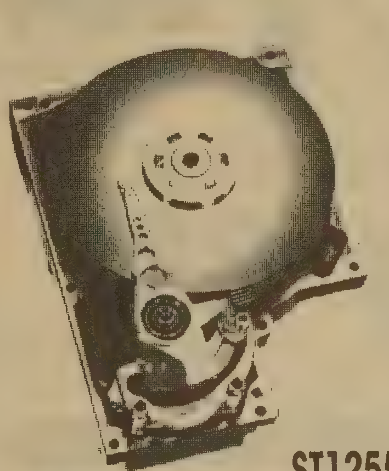
CAPACITY	M/N	CACHE	SPEED	SIZE	INTERNAL	EXTERNAL
170MB	ELS170S	32K	17ms	3.5X1"	$189	$299
240MB	LPS240S	128K	12ms	3.5X1"	$259	$369
270MB	LPS270S	128K	12ms	3.5X1"	$279	$389
340MB	LPS340S	128K	FAST	3.5X1"	$258	$368
540MB	LPS540S	128K	12ms	3.5"X1"	$379	$489
540MB	EMPIRE	512K	9.5MS	3.5"X1"	$499	$629
1.0GB	PD1080S	512K	9.5ms	3.5"X1"	$644	$754
1.4GB	1400S	512K	8.9ms	3.5"X1"	$878	$988
2.1GB	**EMPIRE**	**512K**	**8.9ms**	**3.5"**	**$1199**	**$1299**

▶ FACTORY NEW WITH FULL FACTORY WARRANTY

Seagate

Lowest* Price Guaranteed

BARRACUDA SERIES



BARRACUDA I / 1.6GB

ST11950N
- ▶ 3.5", 8ms
- ▶ 7200RPM
- ▶ Fast SCSI-II
- ▶ 500,000MTBF

INTERNAL $1249
EXTERNAL $1359

BARRACUDA II / 2.1GB

ST12550N
- ▶ 3.5", 8ms
- ▶ 7200RPM
- ▶ Fast SCSI-II
- ▶ 500,000MTBF

INTERNAL $1499
EXTERNAL $1599

BARRACUDA IV / 4.1GB

ST15150N
- ▶ 3.5", 8ms
- ▶ 7200RPM
- ▶ Fast SCSI-II
- ▶ 500,000MTBF

INTERNAL $2499
EXTERNAL $2629

ST12550W Fast Wide SCSI-II....$1789

IDE

CAPACITY	M/N	CACHE	SPEED	SIZE	PRICE
210MB	ST3243A	---	16ms	3.5"x1"	$199
245MB	ST3283A	128K	12ms	3.5"X1"	$269
263MB	ST3290A	64K	16ms	3.5X1"	$239
341MB	ST3391A	120K	13ms	3.5X1"	$299
452MB	ST3550A	256K	12ms	3.5X1"	$309
545MB	ST3655A	256K	12ms	3.5X1"	$399
130MB	ST9145AG	64K	16ms	2.5" NOTEBOOK	$259
209MB	ST9235AG	64K	16ms	2.5" NOTEBOOK	$339

SCSI

CAPACITY	M/N	CACHE	SPEED	SIZE	INTERNAL	EXTERNAL
344MB	ST3390N	256K	12ms	3.5"x1"	$349	$459
456MB	ST3550N	256K	12ms	3.5X1"	$339	$449
545MB	ST36550N	256K	12ms	3.5X1"	$449	$559
1.05GB	ST11200N	256K	10.5ms	3.5"	$749	$859
1.0GB	**ST31200N**	**256K**	**9ms**	**3.5"x1"**	**$699**	**$819**
1.4GB	ST41651N	256K	15ms	FH	$1099	$1299
1.7GB	ST11900N	256K	9ms	3.5"	$1099	$1219
1.6GB	ST11950N	1024K	8ms	3.5"	$1249	$1359
2.1GB	ST42400N	256K	11ms	FH	$1599	$1799
2.1GB	ST12400N	256K	9ms	3.5"	$1248	$1358
2.1GB	ST12550N	1024K	8ms	3.5"	$1328	$1448
2.9GB	ST43400N	512K	10ms	FH	$1999	$2199
2.9GB	ST43401N	512K	10ms	5.25	$2199	$2499
4.1GB	ST15150N	7200RPM	8ms	3.5"	$2499	$2629
4.3GB	ST15230N	7200RPM	8ms	3.5	$2199	$2319
9.0GB	ST410800N	1024K	11.5ms	5.25	$3749	$3949

Seagate and the Seagate logo are registered trademarksof Seagate Technology Inc.

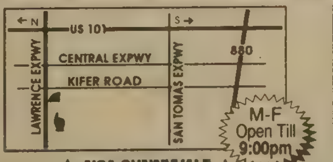
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

Sale Ends 9/18/94

PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610

STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

HARD DRIVES

MORE

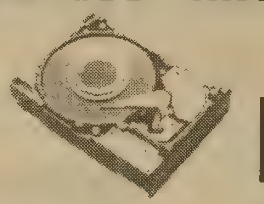
MICROPOLIS

Brand new with 5-year factory warranty

Lowest* Price Guaranteed

1.0GB 3.5"X1" FAST SCSI-II

- MC4110S
- 8.5ms Seek Time
- 512K Cache
- 5400RPM
- 3.5"X1" Low Profile



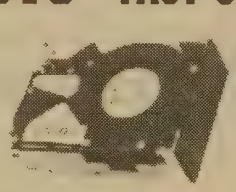
Novell Labs Tested & Approved

$664

EXTERNAL...$774

1.75GB 3.5" FAST SCSI-II OR IDE

- MC2217S/A
- 10ms Seek Time
- 5400RPM
- 3.5"



$898

EXTERNAL...$1039

IDE

	MODEL	RPM	SPEED	SIZE	INTERNAL
1.05GB	MC4110A	5400	8.5ms	3.5"	$669
1.75GB	MC2217A	5400	10ms	3.5"	$899

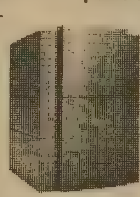
SCSI

	MODEL	RPM	SPEED	SIZE	INTERNAL	EXTERNAL
1.0GB	MC2210	5400	10ms	3.5"	$729	$839
1.0GB	MC2210AV	Audio/Visual			$899	$1029
1.0GB	MC4110	5400	8.5ms	3.5"X1"	$664	$774
1.4GB	MC1908	5400	11ms	FH	$1249	$1449
1.75GB	MC2217	5400	10ms	3.5"	$898	$1039
1.75GB	MC2217AV	Audio/Visual			$1099	$1229
1.75GB	MC2217DW Fast Wide Differential				$1299	$N/A
1.8GB	MC1548	3600	14ms	FH	$1499	$1699
2.0GB	MC1926	5400	11ms	FH	$1399	$1599
3.0GB	**MC1936**	**5400**	**11ms**	**FH**	**$1988**	**$2188**
3.0GB	**MC1936AV**	**Audio/Visual**			**$2299**	**$2499**

RAIDION™

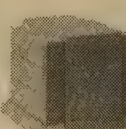
Fault-Tolerant Disk Arrays

Call for Best Prices



MICRODISK®

Stackable External Subsystems



HEWLETT PACKARD

Lowest* Price Guaranteed

High Quality Hard Drives

2.1GB 3.5" FAST SCSI-II

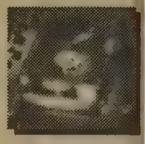
- HP C2490
- 8.9ms Seek Time
- 6400RPM
- 500,000RPM
- 5-Yr. Warr.
- 57 Mbits/s Trans. Rate
- Up to 10Megabytes/s (synchronous)

EXTERNAL.....$1459 **$1349**

1.05GB 3.5" SCSI-II

Formatted Capacity

- HP C2247
- 10.5ms Seek Time
- 5400RPM
- 300,000 MTBF
- 5-Yr. Warr.
- Up to 24 Mbits/s Trans. Rate
- Up to 10 Mbytes/s Trans. Rate (synchrono



EXTERNAL $889 **$779**

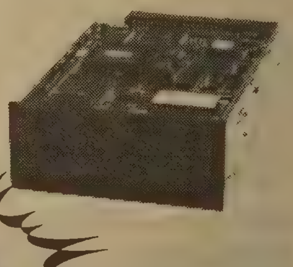
FUJITSU®

Lowest* Price Guaranteed

1.0GB SCSI-II 3.5"

M2694ESA

- 3.5" HH Drive
- 10ms Seek Time
- 256K Read/Write Cache(SCSI)
- 5-Year Warranty



$729

Novell Labs Tested & Approved

5 YEAR WARRANTY

LOWEST NCA PRICES EVER

SCSI

CAPACITY	M/N	CACHE	SPEED	SIZE	INTERNAL	EXTERNAL
240MB	M2637SA	Notebook	11ms	3.5"	$359	N/A
530MB	M2684SA*STATE OF THE ART*				$399	$519
1.0GB	M2694ESA	256K	10ms	3.5"	$729	$839

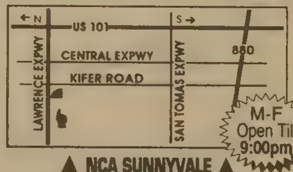
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

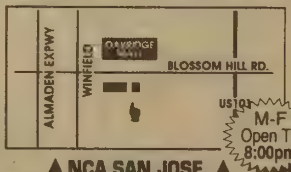
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

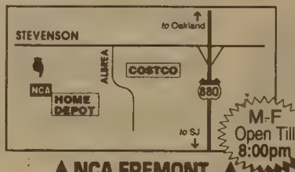
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED* OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

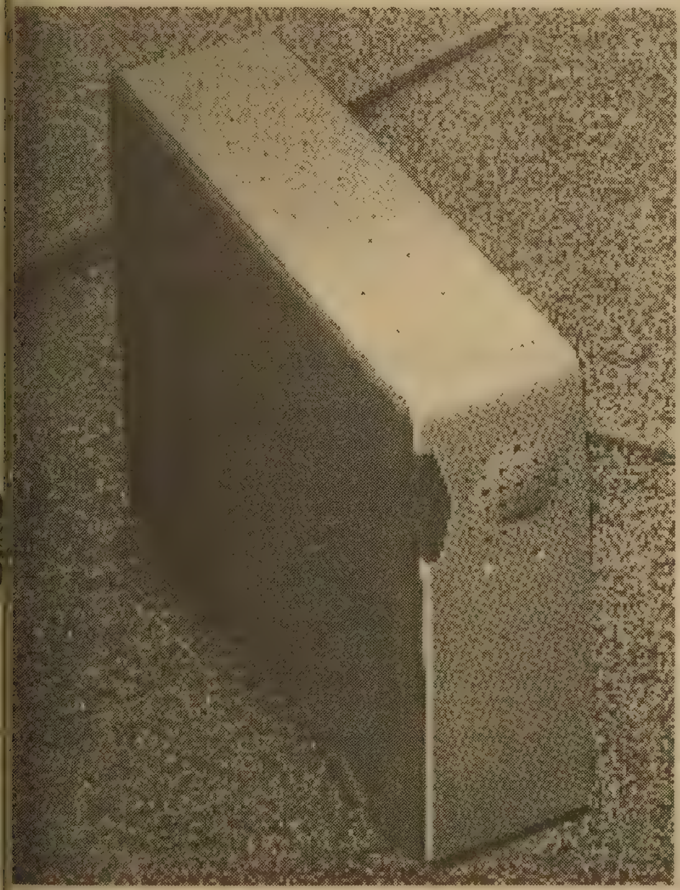
EXTERNAL SUBSYSTEMS

MORE

NCA's High Quality
NEW Barracuda
EXTERNAL SCSI DEVICES
for PC, MAC, SUN, & SGI

We Offer More Options in External SCSI Devices Than Any Other Dealer Worldwide!

- EXTERNAL SCSI HARD DRIVES
- EXTERNAL SCSI TAPE DRIVES
- EXTERNAL SCSI CD ROMS
- EXTERNAL SCSI OPTICALS
- EXTERNAL SCSI REMOVABLES

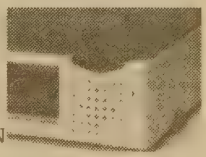


for 3.5"/5.25" or CD- ROM drives

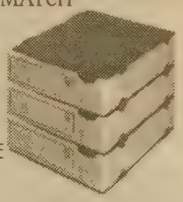
$99

for Full Height drives

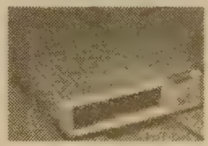
$139



DETACHABLE DUST FILTERS:
The Barracuda series guarantees protection for your sensitive M/O drive heads by a specially designed filter system that can be removed and washed as often as you think is neccessary. The drives are also protected by a refined ventilation system that ensures a steady flow of air.



DISK ARRAY DESIGN:
The entire Barracuda series has been designed to match the hardware structures as defined by Disk Array. All models feature and an AC-OUT socket at the rear panel, a state-of-the-art cooling system, and (optional) brackets that allow for the continuous stacking of additional mass storage devices.



FLEXIBLE POSITIONING:
With the Barracuda series, you can offer customers a variety of operation options. All cabinets can be used in either horizontal or vertical position and feature (optional brackets) that enable you to stack as many storage systems as you can.

UNIVERSAL POWER INPUT:
Ranging from 90-265 VAC, the Barracuda series power supplies are approved by UL, CSA and TUV, and as they boast a metal made precision structure, your mass storage system will definitely meet FCC & BZT(FTZ) requirements.

DISTINCT VISUAL IDENTITY:
The Barracuda has been designed to accommodate the broadest range of external mass storage products while giving you theadvantage of clear design characteristics that are neccessary to establish a distinct image and brand name awareness.

OPTIONS:

REMOVABLE H.D.D. KIT — $49

Thanks to a special frame design hard drives can be easily removed, while the power is automatically cut off to protect the circuits, and if you consider that there is even an ID switch connector for SCSI, you will certainly agree that the Barracuda series is much more that just a pile of boxes...

STACKER KIT includes: — $19

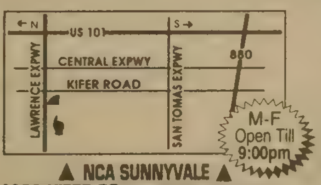
4 Stackable Brackets, SCSI 50 to 50 Centronics cable (<10"), Power cord male-female(<10")

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

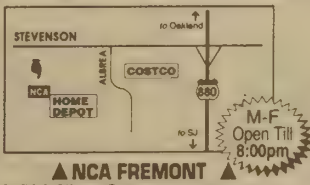
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. Fax(408) 739-2420

Mail Order Dept.
Call (408) 522-3050

LOWEST PRICE GUARANTEED* OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

MULTIMEDIA

TURTLE BEACH SYSTEMS

Multimedia PC

NEW!
CRESCENDO

CRESCENDO™

Music Upgrade Kit

Music Upgrade Kit

Learn To Play The Piano, Create And Jam With Your Own Computerized Band!

•Crescendo ™ includes a full-size professional 49-key music keyboard, the Miracle Piano Teaching system ™ software, Wave/SE ™ sound editor Stratos ™ MIDI sequencer software, and Band-In-A-Box ™ musical accompaniment software.

$359

WAVE FOR WINDOWS
Professional Sound Editing Software For Your Windows 3.1 Compatible Sound Card

Wave provides recording, editing, and playback of digital sound. You can rearrange a piece of recorded music, add perfect fade-in and fade-out, choose from a wide selection of sound special effects like reverb, digital delay, unwanted pauses and mistakes from narration tracks, even create incredibly unusual system sounds. **NEW : Digital Effects Processor, On-line Context-Sensitive Help Function, Speed Controller, & Support for Microsoft Compression**

Version 2 Includes:

WAVE Q
Automated EQ Presets

EFX CLIPS
Automated Effects Presets

- 6 new sound processing effects
- Sound speed control
- Contex-sensitive online help
- Microsoft ADPCM compression

$79

THE TURTLE TOOLS
Essential tools to use your sound card or MPC to its fullest FOR MULTIMEDIA

- **Midisoft Session™** - MIDI sequencer for developing or editing musical compositions
- **MIDI tune up™** - MINI file editor for non-musicians. Lets you graphically change tempo, key instrument and other setting
- **KeyPlayer™** - Non-musicians can play and record music using just your PC keyboard.
- **SoundAttach™** - Attach MID and/or WAV sound files to all Windows actions. Randomly if you like!
- **Sound Bank™** - Over 300 Sound Effects and Muscial pieces in 4 different WAV formats and Redbook audio for professional quality!

$39

KARAOKE Karaoke Software

- **Pitch Control** - with the click of a mouse you can customize any song to suit your vocal range.
- **Digital Audio Integration** - Click on RECORD, play you MIDI file and sing your heart out into the microphone to preserve the star performance of you and your MIDI band.
- **Speed Control** - Alter playing speed to suit anybody, old or young.
- **TrueType™** - Font Support - Select any font from the TrueType collection to make the words look the way you want... and so Grandpa can read'em.
- **Windows Sound Card Compatible** - Turtle Beach MIDI Karaoke supports any Windows 3.1 sound card. The MIDI section is totally General MIDI compatible.
- **Bitmap Import** - import any .BMP file to create custom backgrounds for your song text to scroll

$39

rio *Professional MIDI Synthesizer Module*

•Add Turtle beach quality MIDI sound to your Turtle Beach Tahiti, Sound Blaster 16 or any other WaveBlaster compatible synthesizer connector.
•Ability to add new instruments via our SampleStore™ sample RAM. Never be limited to factory supplied instrument again. Comes with 256K of RAM for new samples, user upgradable with standard SIPPs to 4MB.
•Real-Time Effects Processor. Place your music in a studio, concert hall or stadium with a variety of effects such as reverb & echo. Effects are software-based for future upgradability.

$139

maui *Wavetable Synthesizer Upgrade*

•Now you can have all of the power of today's hottest new sound cards, plus a few new wrinkles, and keep your old sound card around for games!
•Ability to add new instruments via our SampleStore™ sample RAM. Maui is definitely the best of both worlds!

$139

monterey *Multimedia Sound Card*

Digital Audio, Stereo Mixer, MIDI Synthesizer, Digital Signal Processor, Audio Performance, MIDI Interface (Sample Store)

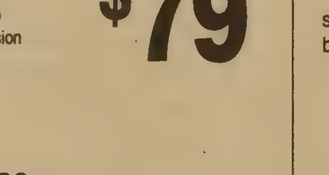
$329

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

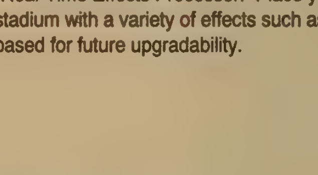
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

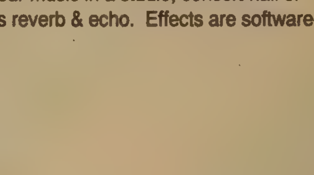
RICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government,
Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT
Call (408) 522-305

LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATI

MULTIMEDIA

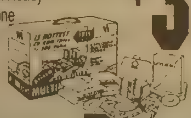
MORE

MEDIA VISION

FAMILY DELUXE
Multimedia Kit

- 16-Bit Digital Stereo Sound Card
- Incredible Double Speed CD-ROM Drive
- 320ms Access Time
- Photo CD Multimedia Ready
- Condensor Microphone
- Amplified Speaekrs
- 9 Software Titles

MV2000



$339

SUPER DELUXE
Multimedia Kit

- 16-Bit Digital Stereo Sound Card
- Incredible Double Speed CD-ROM Drive
- 320ms Access Time
- Photo CD Multimedia Ready
- Condensor Microphone
- Amplified Speaekrs
- 15 Software Titles

MV3000

$379

PREMIUM DELUXE
Multimedia Kit

- Double Speed 180ms SCSI-2 Reno Portable CD-ROM & Audio Disc Player
- Premium 16-Bit Sound Card
- 15 Software Titles
- Protective Carrying Case
- Two Powered Speakers
- Microphone & Headphones

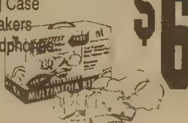
MV4000

$499

PRO DELUXE
Multimedia Kit

- Triple Speed 195ms SCSI-2 CD-ROM
- Premium 16-Bit SCI-2 Sound Card
- 15 Hot Software Titles
- Protective Carrying Case
- Two Powered Speakers
- Microphone & Headphones

MV5000



$679

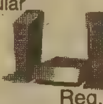
PRO AUDIO STUDIO 16
SOUND CARD

- True Stereo Sound
- Advanced 20 Voice Stereo Synthesizer
- MIDI/SCSI interface
- Voice Recognition
- Microphone & S/W

$119

MEMPHIS
External Multimedia System

Dual speed CD ROM and a high power CD Audio Player in one compact ergonomic design.
• Double speed SCSI Multisession photo CD Compatible Drive • Includes 16-Bit Digital Audio Card & the most popular CD Titles



$459

Reg. $699
WHILE SUPPLIES LAST!

PRO 16 MULTIMEDIA SYSTEM III

- **Triple Speed Multimedia Upgrade Kit**
- Triple Speed CD ROM
- 450Kb/Sec 195ms
- 250K Buffer
- Pro Audio Spectrum 16 Sound Card
- 16-Bit Recording & Play back

$659

ProAudio 16 Basic: 16 Digital Audio CD-Quality Card	$79
EXTERNAL KIT For Pro Audio Spectrum (allows SCSI Ext. Connection)	$49
MIDI Mate (External midi connector box)	$45

MEDIAMAGIC

SONY 33A DOUBLE SPEED CD-ROM DRIVE

- Internal Double Speed CD-ROM Drive
- Controller Card, Cables, Documentation
- 8 FREE Software Titles on 2 CD-ROM Disks

RETAIL PACKAGE!

$129

PCMCIA SOUND CARD 16-bit, type 2, 20-voice, includes software, headphones	$299
ISP-16 SOUND CARD 16-bit, 20-voice (OPL3) CD-ROM interface	$79
DSP-16 PLUS SCSI SOUND CARD 16-bit card with wavetable & DSP	$139

AITech AUDIOSHOW Audio & Video

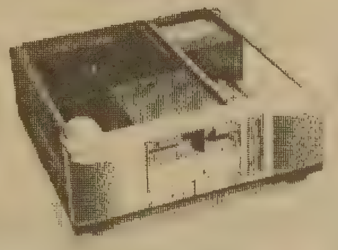
- VGA to PAL or NTSC; converts computer's output to TV or Video tape
- 16-Bit Stereo Audio with 4-Watt amplifier; CD Quality recording
- CD ROM interface. Joystick port, MIDI In/Out and built-in amplifier

$329

MultiMedia Computer Case

30Watts per Channel

- 30 Watts of Power per Channel
- Power Supply UL Rated
- Four Drive Bays
- Front Controls and Jacks
- State of the Art Quatlity and construction



$109

NCA can Build your Unique Dream MultiMedia Machine to your Specs. We Offer More Options so you can have a choice.

ORCHID

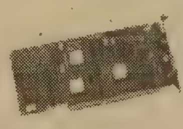
SEE Page 23

SIGMA DESIGNS®

REELMAGIC COMPLETE MULTIMEDIA UPGRADE KIT

- Double Speed CD-ROM
- High Quality Speakers
- Bundled Software Titles, & ReelMagic Controller Card

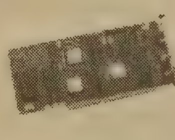
$594



REELMAGIC LITE
QUALITY VIDEO & CD QUALITY AUDIO CONTROLLER CARD

- Plays Video CD feature films on your PC
- On-board MPEG Video and Audio Decomporession
- 32,768 Color in any mode - 30 fps - Full screen Size

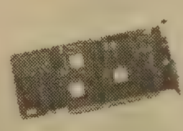
$279



REELMAGIC THEATER
QUALITY VIDEO & CD QUALITY AUDIO CONTROLLER CARD

- Plays Video CD feature films on your PC
- On-board MPEG Video and Audio Decomporession - 16-Bit Sound Capability
- 32,768 Color in any mode - 30 fps - Full screen Size
- Supports IDE CD-Rom Drives

$359



REELMAGIC SCSI
QUALITY VIDEO & CD QUALITY AUDIO CONTROLLER CARD

- Plays Video CD feature films on your PC
- On-board MPEG Video and Audio Decomporession - 16-Bit Sound Capability
- 32,768 Color in any mode - 30 fps - Full screen Size
- Supports Scsl CD Rom Drives

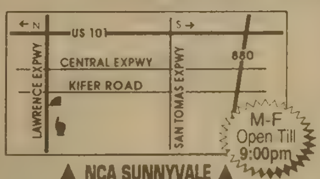
$429

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

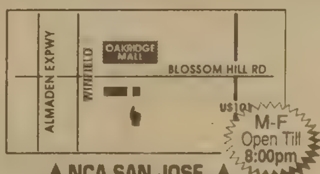
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

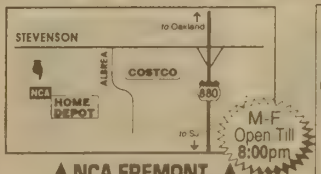
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging Not valid for one of a kind, clearance or limited quantity offers or on bonus or free offer items NCA reserves the right to limit quantities on all products Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

CD ROM TITLES

MORE

Guaranteed Lowest Prices

Over 400 CD ROM Titles In Stock at all locations

Including: Adventure, Games, Educational, Children's, and many more for PC & MAC...

CHOOSE ANY OF THE FOLLOWING CD TITLES FOR ONLY...

1001 UTILITIES
AMERICAN BUSINESS PHONEBOOK 92
BETTY BOOP
BIBLES & RELIGION
BRAIN DRAIN
BUGS BUNNY
BUSINESS ASSISTANT
CALIFORNIA COLLECTION
CLASSIC CARTOONS
CLIPART HEAVEN
CLIPART WAREHOUSE
COMPLETE BOOKSHOP
COMPLETE HOME & OFFICE LEGAL GUIDE
COMPUTER REFERENCE LIBRARY
DEATHSTAR ARCADE BATTLES
DICTIONARIES & LANGUAGES
ENCYCLOPEDIA OF SOUND 1
ENCYCLOPEDIA OF SOUND 2
FLASH CARDS ON VIDEO
FONTMASTER
FUTURA
GAME ARENA
GAME JAMBOREE
GAMES GALORE
GARDENING
GOZILLA VS MEGALON
GREAT CITIES VOL.2
HAM RADIO
HIV/AIDS
HUGOS HOUSE OF HORRORS
JOKES & PRANKS
LEARNING ADVENTURE
LEARNING HEAVEN
LETS PLAY
MIRROR-MIRROR
MOTHER OF ALL CLIPART
MULTIMEDIA MANIA
NIGHT OF THE LIVING DEAD
OLDIES BUT GOODIES
ORIGINAL SHAREWARE
OUR SOLAR SYSTEM
PORKY PIG
PUBLISH IT! 2.0
PUBLISH IT! (MAC)
SHAREWARE HEAVEN
SNEAK PEEKS
SOFTWARE VAULT
SOUND SENSATIONS
SPORTS BLOOPERS
STRAIGHT FROM HEAVEN
SUPER GAMES FOR WINDOWS 2
SUPER GAMES FOR WINDOWS 3
SUPER PROGRAMMER
TECHNOTOOLS
THE COLLECTION FOR WINDOWS
THE GAMES COLLECTION
THE GOLD COLLECTION
TOO MANY TYPE FONTS
VARIETY STORE
VGA SPECTRUM 1
WINDOWARE
WINDOWS AT ITS BEST
WORLDTRAVELER

$7.99

VALUE PAK 1

12 HOT CD TITLES! COMPACT disc

- GROLIER ENCYCLOPEDIA
- THE ANIMALS BY S.D. ZOO
- CHECKERS
- THE TOOLWORKS ROBOT TANK
- BACKGAMMON
- THE PUZZLE GALLERY
- DISAN LAU
- BEYOND THE BLACK HOLE
- CHESSMASTER 2100
- LOOPZ
- CRIBBAGE KING
- LIFE & DEATH

12 Titles on 3 CD Discs

$59

VALUE PAK 2

14 HOT CD TITLES! COMPACT disc

- '94 COMPTON'S ENCYCLOPEDIA
- U.S. ATLAS
- MAVIS TEACHES TYPING
- ROBOCOP 3-D
- F-29 RETALIATOR
- PUSH-OVER
- EPIC
- CHESSMASTER 3000
- LIFE & DEATH II
- MIGHT & MAGIC II
- D/GENERATION
- CONTRAPTION ZACK
- CHESSMASTER 2100

14 Titles on 3 CD Discs

$69

VISIT ANY OF OUR SHOWROOMS TODAY

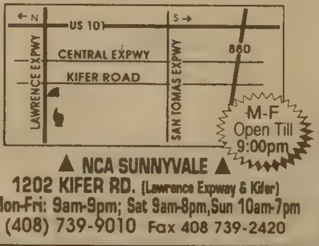
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

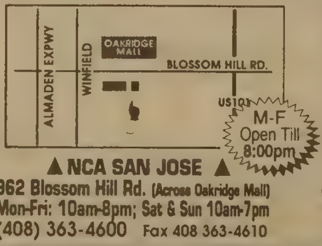
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

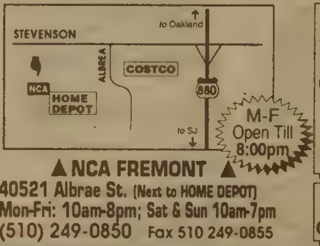
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA
CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED' OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

CD ROM DRIVES

MORE

TEAC

- CD-50 -

WHILE SUPPLIES LAST

INTERNAL SCSI-II DOUBLE SPEED CD-ROM

- SCSI-II, DOUBLE SPEED
- 265ms, 335KB/Sec
- Multisession photo CD
- Anti-dust construction

INCLUDES:
2 AUDIO CABLES
Caddy Included

$199

EXTERNAL $299

Optional MAC Software $10

SONY 33A

NEW DOUBLE SPEED 300KB/SEC

- Controller Card
- Cables and Software

Kit packaged by MediaMagic

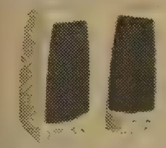
$129

8 FREE SOFTWARE TITLES ON 2 CD-ROM DISKS! PLUS MORE...

SPEAKERS

RECOTON

AMPLIFIED SHIELDED STEREO SPEAKERS

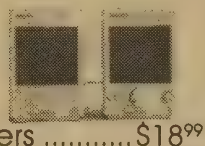


Includes AC Power Adapter
64555

$24.99

Sheilded Stereo Speakers By RECOTON $9.99
64540

Labtec



CS 150 Amplified Speakers	$18.99
CS 180 2.5" 90 DEGREE PIVOT	$22.99
CS 550 Amplified Speakers	$27.99
CS 800 Hi-Qualtiy Amplified Speakers	$35.99
CS1000 Under Monitor 5watt	$89.99

GALLANT

GSP-1000 80watt amplified Speakers . $89.99

Twin Sound

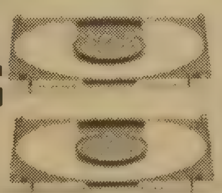
Dlax-20 Amplified Multimedia Speakers .. $59.99

ALTEC LANSING

SEE AD ON PAGE 13

Quality Sheilded Computer Speakers CP-55 .... $4.99

CD ROM CADDIES



$4.99 Ea.

THE ORIGINAL CADDY DESIGN

Audio Cables for most CD-ROMs & Sound Cards

$5.99 Ea.

NEC

SCSI CD ROMs

SEE PAGE 17

backpack MicroSolutions

CD-ROM Drive

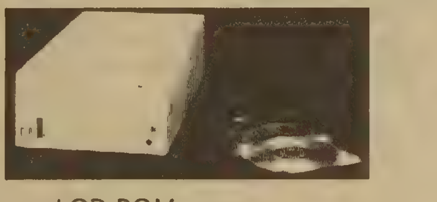
Double Speed Parallel port External CD-ROM Drive

$369

SINGLE SPEED VERSION..$299

250ms
300Kb/Sec
Double Speed High Performance drive
Ideal for Notebooks or Laptops
Supplied Device Drivers
Multi-Session Photo CD compatible

PIONEER®



- High Speed CD-ROM
- MiniChanger, featuring QUADRASPIN™

DRM-602X

- **6-Disk Mini CD ROM Changer**
- 307KB/Sec, 300ms Access
- SCSI-II Interface

$649

DRM-604X

- External SCSI/SCSI-2 Subsystem
- **6-CD ROM Magazine**
- Software for MAC or IBM
- 300ms/ Fast 612Kb/Sec

$995

DRM-1804X

- External SCSI/SCSI-2 Subsystem
- **Up to 18-CD ROM discs**
- 3 (6-disc) magazine changer
- 300ms/Fast 614Kb/Sec

$1949

6-CD MAGAZINE............$29

PLEXTOR

Formerly Texel

High Performance SCSI-II CD ROM Drives

DoubleSpeedPLUS

- SCSI-II CD 3028
- *FAST* 240ms
- Multi-spin/330Kb/Sec.
- Caddy & Manual

$239

- DM-5028
- External W/Caddy

$349

QUAD-SPEED SCSI-II INTERNAL CD-ROM DRIVE

4PLEX

- **SCSI-II QUAD SPEED**
- 150ms, 600KB / Sec
- 1MB Buffer
- Multisession Photo CD
- 2 Yr. Warranty

$465

TOSHIBA

3401B

- SCSI-II Fast DUAL SPEED CD ROMs
- 200ms / 330Kb/sec
- Multi-Spin / Multi-Speed
- 256K CACHE Buffer
- Caddy Included

$258

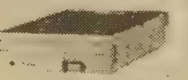
EXTERNAL.............................$364

PHILIPS

- 300KB/Sec. DOUBLE SPEED
- Kodak Multi-session
- Includes card & cable

$129

MITSUMI



- **Double Speed**
- 250ms 300Kb/Sec
- Includes Card & Cables

$139

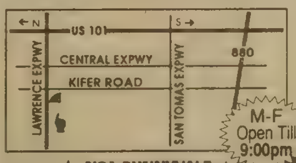
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

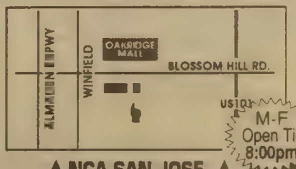
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

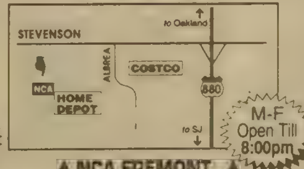
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

CD ROM Kits & Dr

MORE

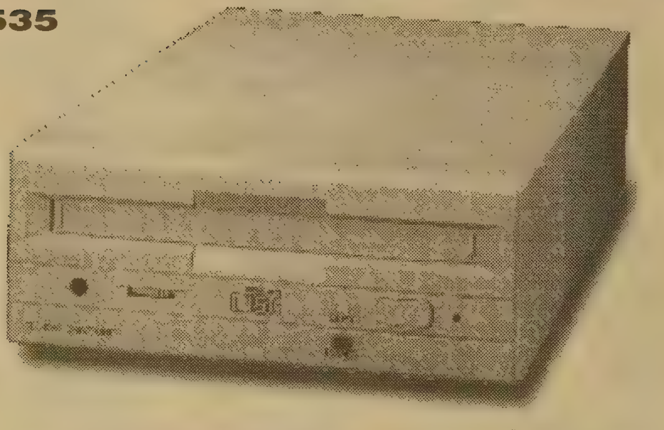
CHINON

Dual Speed, Multisession-A Multimedia Workhorse!

PC Computing BEST
October 1993
Chinon CDX-535

PC MAGAZINE EDITORS' CHOICE
February 22, 1994
Chinon CDS-535

CD-535



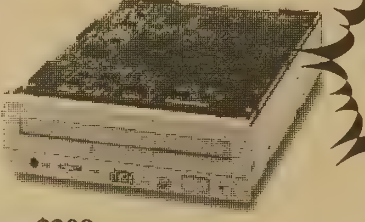
Chinon's new 535 Series CD-ROM drives feature MPC™, Photo CD™, and QuickTime™ compatibility. These incredibly fast drives deliver CD-ROM data at a double speed of 300K per second and feature a SCSI-2 interface for use with both Macintosh and PC compatible computers.

The 535 Series CD-ROM drives are proven multimedia performers designed to excel in both MPC and QuickTime applications. Available for either internal or external installation, these drives work with ISO 9660, High Sierra, Macintosh HFS, XA, Multisession Photo CDs and standard audio compact disks.

Internal SCSI-II Dual Speed CD ROM

With SCSI Controller Card, Software & Terminator

- ▶ Internal SCSI-CD ROM Drive
- ▶ Multisession Photo CD
- ▶ XA Compatible
- ▶ 256K Buffer
- ▶ 220ms Seek Time
- ▶ Double Doors
- ▶ Sealed Mechanism
- ▶ SCSI Controller Card
- ▶ Cable



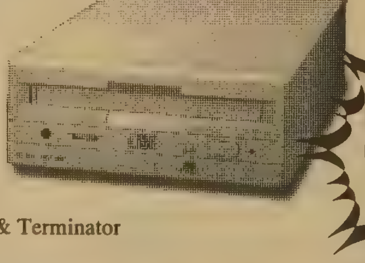
$329

Internal Unit Only.....$309
Includes Caddy & Manual

External SCSI-CD Dual Speed CD ROM Kit

With SCSI Controller Card, Software & Terminator

- ▶ External SCSI-CD ROM Drive
- ▶ Multisession Photo CD
- ▶ XA Compatible
- ▶ 220ms/256K Buffer
- ▶ Double Doors
- ▶ Sealed Mechanism
- ▶ Drivers
- ▶ Audio Play
- ▶ Software
- ▶ Caddy
- ▶ Selectware Discription & Terminator



$449

External Unit Only.....$419
Includes Caddy & Manual

CREATIVE

CREATIVE LABS, INC.

Sound BLASTER

Presenting the Complete PC Multimedia Solution

DIGITALEDGE CD™ 3X

MULTIMEDIA UPGRADE KIT

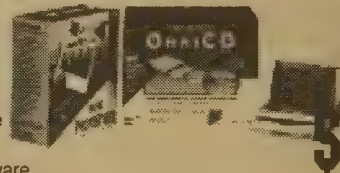
- Sound Blaster 16 with ASP Chip
- Creative Labs Triple Speed CD ROM
- Microphone included
- High quality Stereo speakers:
- The most valuable CD ROM titles Bundle includes
  - Aldus PhotoStyler, Macromedia Action digital Video Software Toolworks Multimedia Encyclopedia, Authorware Star, Microsoft Works for Window, Microsoft Bookshelf

$669

OMNI CD™

CD ROM UPGRADE KIT

Creative Labs Double-Speed CD ROM Drive
CD-ROM interface card and cables
Includes FREE Aldus PHOTOSTYLER software



$199

GAME BLASTER CD 16™

ADVANCED MULTIMEDIA UPGRADE KIT

- Game Blaster 16
- Double Speed CD ROM Drive
- High Performance Joystick & Speakers
- Top Games Bundled CD ROM Titles

$359

EDUTAINMENT CD 16™

MULTIMEDIA UPGRADE KIT

- Stereo Speakers
- Sound Blaster 16, 16-Bit stereo sound Card
- Creative Labs Double-Speed internal CD ROM drive
- CD ROM Software Bundle Includes: Software Toolworks Multimedia Encyclopedia, Lucasfilm Games (3 games) Simulations Sherlock Holmes Detective.
- Windows 3.1 and OS/2 2.0 Compatible

$379

DISCOVERY CD 16™

MULTIMEDIA UPGRADE KIT

- Sound Blaster CD 16
- Double Speed CD ROM Dirve
- Stereo Speakers
- Top Quality Software

$319

DISCOVERY CD 8....$279

Sound Blaster Value 8-Bit Sound Card With software	$59
Sound Blaster Pro Value Edition	$79
Sound Blaster 16 Basic Value Edition	$99
Sound Blaster 16 MultiCD/with ASP	$129/165
Wave Blaster	$169
Video Spigot (Video Capture)	$219
Video Blaster AWE32	$269
Sound Blaster 16 SCSI-II/with ASP	$149/189

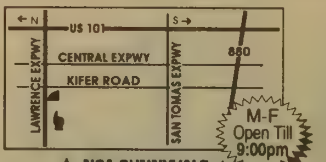
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

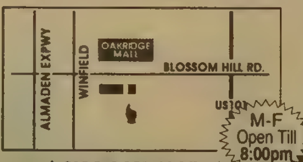
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

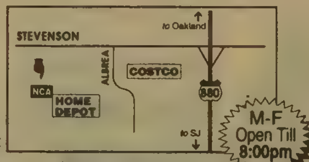
CE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

EST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

MULTIMEDIA

MORE

YAMAHA

YAMAHA POWERED MONITOR SPEAKERS

YST-M10

$89

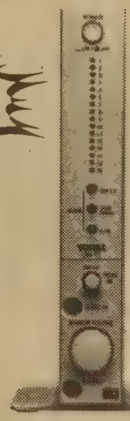
- Video Shielded
- Active Servo Technology delivers Life-Like sound
- 80Hz-20KHz ± 3dB
- Includes AC Adapter
- 4 Star Rating "MACWorld April 1994"

YAMAHA EXTERNAL MIDI SOUND CARD

CBX-T3

PC or MAC

- Advanced Wave Memory
- 192 Instrument & Effect Voices
- 10 Different Drum & Percussion Sets
- Connects Via Serial Port on MIDI Port
- Available for PC or MAC
- Includes Passport Trax™ MIDI Player Software Bundle
- "Best Synthesizer" Multi-Media World

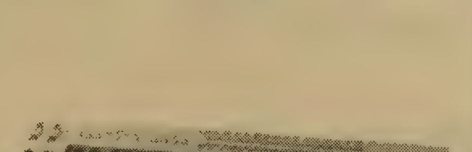


$279

YAMAHA MIDI-CONTROLLER PIANO KEYBOARD

K-3

- Professional Quality Keyboard
- Velocity Sensitive
- Pitch Bend Wheel
- Modulation Wheel
- Operates Sound Cards with MIDI Port



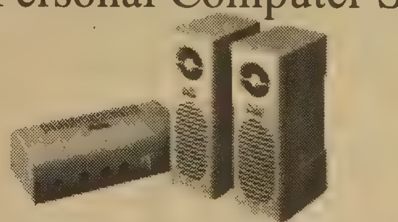
$339

ALTEC LANSING *Audio Solutions for Computers!*

High Power Quality Multimedia System

ACS50

Personal Computer Speaker System



$67.99

- Shielded Satellite Speakers Mount to Monitor
- Two Line-in Jacks Mix Two Audio Sources
- Volume Control to Adjust Combined Speaker Output
- ON/OFF Switch to Control Power to Speaker
- Headphone Output Connector for Private Sounds Monitoring
- Amplifier Control Module with Built-In Bass & Treble Boost Circuitry

ACS100.1

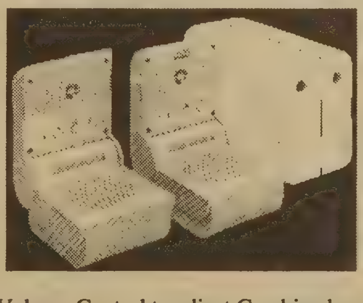
Amplified Speaker System

$99.99

- Volume Control to adjust Combined speaker output
- Bass Control adjusts low frequency output
- Treble Control adjusts high frequency output
- Headset Input Jack bypasses speakers for private audio monitoring
- 3 inch magnetically shielded Mid/Bass Driver
- 11mm Dome Tweeter with Ferrofluidic cooling

ACS300.1

Computer Speaker System with Subwoofer



$239.99

- Volume Control to adjust Combined speaker output
- A/B variable control for mixing the output of two sources
- Treble Control adjusts high frequency output
- Balance Control adjusts output level of each speaker
- Bass Volume for variable control of subwoofer output
- Headset input Jack bypasses speakers for private audio monitoring

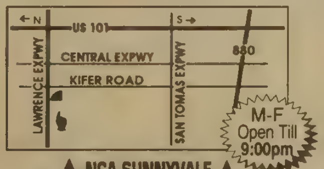
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

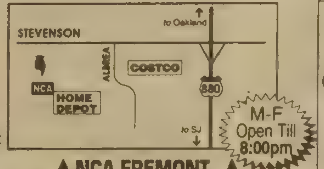
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expwy & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
WINFIELD
BLOSSOM HILL RD.
US 101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

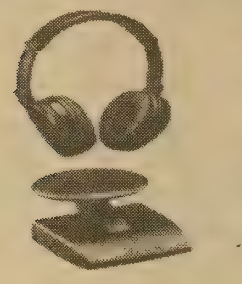
©1994 INVERSE CORPORATION

Brand Names

RECOTON®

MULTIMEDIA HEADPHONES

WIRELESS STEREO HEADPHONE



Enjoy the freedom of wireless with this Recoton W 500 Wireless Stereo Headphone. New 900Mhz signals travel through walls & Floors up to 150 ft. away! Watch & listen to your multimedia computer without disturbing others at the office or at home!

- No Wires
- No line-of-sight limitations
- Built-in rechargable battery

W500

$99

WIRELESS STEREO HEADPHONE

The ultra small receiver features volume control, tuning control, on/off switch and a belt clip. New 900Mhz signals travel through walls & Floors up to 150 ft. away! Watch & listen to your multimedia computer without disturbing others at the office or at home!

- No Wires
- No line-of-sight limitations
- Use your favorite stero head phone or the high performance headphone included

W200SX

$79

LIGHTWEIGHT DIGITAL STEREO HEADPHONES

This is a lightweight digital stereophone with foldaway earcups for compact storage. Supplied with a 1/4" adapter for home use and a convenient carrying pouch for portable applications.

EG24

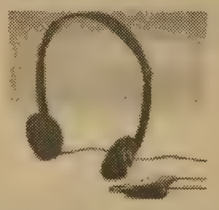
$17⁹⁹

UNIQUE LIGHTWEIGHT STEREO HEADPHONES

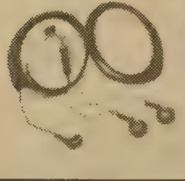
This unique, lightweight stereophone features 30mm Samarium Cobalt speaker elements and a single entry cord with in-line volume control. Includes 1/4" adapter.

EG18

$9⁹⁹



MICRO IN-THE-EAR EARBUDS



This micro "in-the-ear" stereo earbud is supplied with a deluxe winder case and unique micro volume control.

EG36

$6⁹⁹

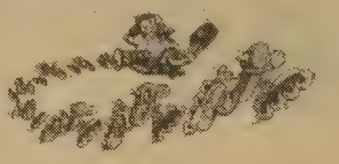
ATI ATronics International, Inc.

SPECIALIZING IN CACHE CONTROLLERS!!
SPECIALIZING IN COMPATIBILITY!!

IDEal PCI Cache Controller and Accelerator

ANOTHER PLUG-N-PLAY SOLUTION TO ENSURE OPTIONAL COMPATIBLITY & SPEED

IDEAL *Controller*



- 20MB ETR
- 4 IDE hard drives
- 4GB for all drives
- Ease of use, software programmable, NO jumpers

$159

IDEal VL-Cache Controller and Accelerator

Perfect for anyone with large files such as windows base applications, CD-ROM videos, and for those who HATE waiting for hard drive access!

IDEAL *Controller*

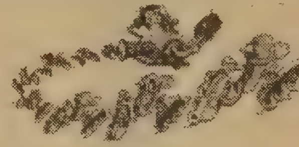
- Supports up to 16MB of on-board cache
- Supports up to four IDE Hard Drives
- Total capacity for alldrives is up to 2GB
- Compatible with DOS, Windows, OS/2 and major operating systems

$109

IDEal-ISA Cache Controller and Accelerator

Plug-N-Play solution to eliminate throughput bottlenecks, and not occupy CPU Time.

IDEAL *Controller*



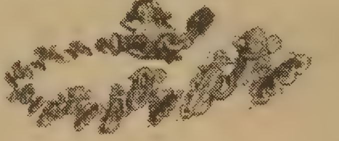
- Supports up to 16MB of on-board cache
- Supports IDE drives up to 4GB in capacity
- Supports up to 4 IDE hard drives
- Compatible with DOS, Windows, OS/2 and major operating systems.

$99

IDEAL -PCI ™:The IDE Controller and Accelerator for PCI-Bus

Atronics again is the 1st to introduce new technology (PCI 8/93) and ensure Compatibility!

IDEAL *Controller*



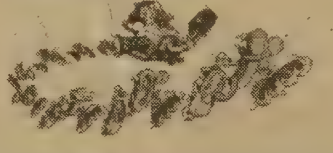
- ANSI ATA 3.0 compatible
- PCI version 2.0 compatible
- Compatible with DOS, Windows, OS/2 and major operating systems.
- 13MB maximum PCI-bus Data Transfer Rate
- Software programmable cycle times to adapt to different IDE transfer rates.
- Supports up to 2 IDE hard drives

$29

ATI-IDEAL Enhancer

Perfect buy with new hard drives!

IDEAL *Enhancer*



- Increase hard drive performance by 40-80%
- Plug-n-play for easy installation-NO software required
- No cables to connect, No jumpers to set
- It's hassel-free
- Increase your hard drive performance with multiple-sector transfer
- Compatible with all major operating systems

$24

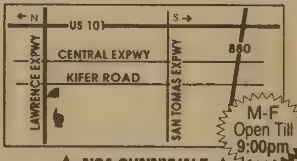
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

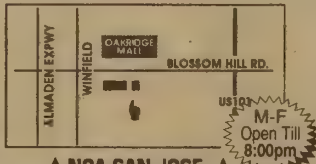
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

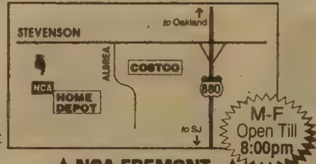
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10[illegible]m
(510) 249-0850 Fax 510 249[illegible]5

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

OWEST PRICE GUARANTEED' OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. It[illegible]st be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

CONTROLLER CARDS

MORE

gsi™ Intelligent Accelerator/IDE Boards

GSI Model 11
8-Bit Four-Floppy & 250MB Tape Accelerator Board

- High-speed 1MB/sec. floppy interface (up to four floppy drives)
- Doubles the speed of 250MB (QIC-80) tape drives
- Fully supports 2.88MB floppy disk drives
- Supports "Media-Sensing" compatibilites of 2.88MB floppies
- Co-resides with other disk controller boards
- Perfect floppy or tape upgrade board

$59

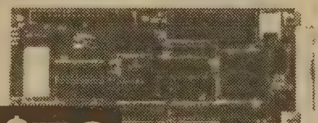
GSI Model 18
16- Primary or Secondary IDE Accelerator Board

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports two IDE drives
- Increases IDE hard drive data transfer rates up to 80%!
- Supports new high-capacity IDE hard drives
- Compatible with Windows 3.x, OS/2 2.x & DOS
- Tested and recommended by Micropolis, Fujitsu, Maxtor, Seagate, Western Digital, Quantum and Conner

$49

GSI Model 21
16-Bit IDE, Floppy & 250MB Tape Accelerator Board

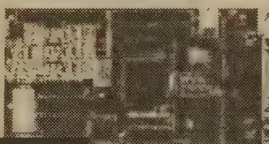
- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to two IDE drives
- Increases IDE Data transfer rates up to 80%!
- Supports new high-capcity IDE hard drives
- High speed 1MB/sec. floppy interface(up to 4 floppy drives)
- Doubles the speed of the 250MB (QIC-80) tape drives
- Fully supports 2.88MB floppy disk drives
- Compatible with Windows 3.x, OS/2 2.x & DOS



$59

GSI Model 32
16-Bit Multi-Port IDE, Floppy, Tape, & I/O Accelerator Board

- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to two IDE drives
- Increases IDE Data transfer rates up to 80%!
- Supports new high-capcity IDE hard drives
- High speed 1MB/sec. floppy interface(up to 4 floppy drives)
- Doubles the speed of the 250MB (QIC-80) tape drives
- Fully supports 2.88MB floppy disk drives
- Dual 16550 UART serial ports & one bi-directional parallel port
- Compatible with Windows 3.x, OS/2 2.x & DOS



$99

GSI Model 4C
16-Bit Four-Channel, Eight-IDE Accelerator Board

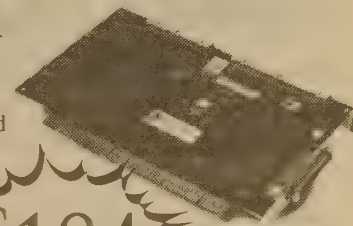
- 16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- Supports up to eight IDE drives
- Increases IDE Data transfer rates up to 80%!
- Supports new high-capcity IDE hard drives
- No drivers needed
- Perfect for Novell mirroring or duplexing
- Compatible with Windows 3.x & DOS

$129

Qlogic™ *Affordable High Performance SCSI Controllers*

Fast!SCSI™ EISA

- Patented 400 Series high-speed SCSI Processor
- 10MB per second fast SCSI-II
- Free CorelSCSI for CD-ROM and HDD included
- Comprehensive software support
- 50-pin internal SCSI Cable provided with support for up to three internal drives
- 5-Year Warranty

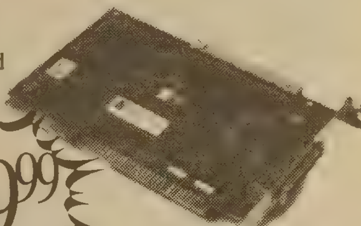


$184

***FAST!SCSI* EISA FL**
With Floppy Connector....$199

Fast!SCSI™ ISA

- Patented 400 Series high-speed SCSI Processor
- 16-bit PIO Data Transfer>3MB/Sec.
- Free CorelSCSI for CD-ROM and HDD included
- Comprehensive software support
- 50-pin internal SCSI cable provided
- Supports up to 7 SCSI devices
- 5-Year Warranty

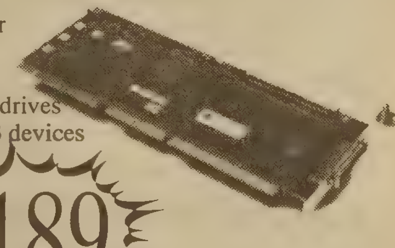


$109.99

***FAST!SCSI* ISA FL**
With Floppy Connector....$124.88

Fast!SCSI™ VESA Local FL

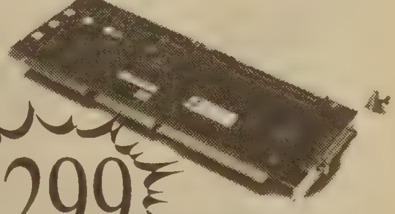
- Patented 400 Series high-speed SCSI Processor
- Supports 33MHz & 50MHz
- 32-bit VLB Host Data Transfer
- Free CorelSCSI for CD-ROM and Winchester drives
- 50-pin internal SCSI cable provided for up to 3 devices
- Comprehensive software support
- **FLOPPY CONNECTOR, SUPPORTS 2 FLOPPY DRIVES**
- Supports up to 7 SCSI devices
- 5-Year Warranty



$189

Fast!SCSI™ PCI

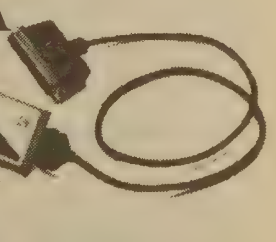
- Bus Master Support
- Support fast & Wide SCSI-II
- 2500 IO/Sec. Throughput
- Corel SCSI Ver. 2 with Netware Support
- Full Software Driver Support



$299

Fast!SCSI™ PCMCIA

- Patented 400 Series high-speed SCSI Processor
- 16-bit PIO Data Transfer>3MB/Sec.
- Free CorelSCSI for CD-ROM and Hard Drive
- Occupies a single PCMCIA slot
- Comprehensive software support
- Supports up to 7 SCSI devices
- 5-Year Warranty



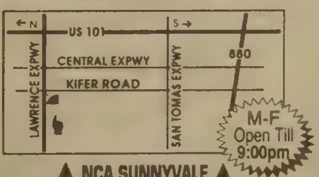
$189

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

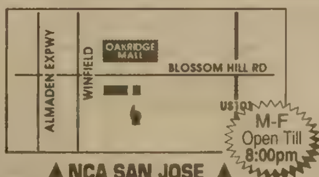
PURCHASE ORDERS

Sale Ends 9/18/94

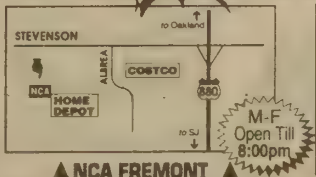
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

CONTROLLERS

MORE

SCSI CONTROLLERS

adaptec

SCSI CONTROLLERS

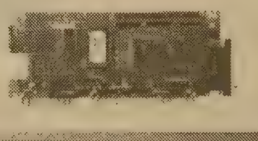
MODEL	DESCRIPTION	PRICE
1505	TOTAL CD 16-BIT SCSI-II	$59
1510	CD ROM 16-BIT -SCSI CARD KIT	$89
1522	16-BIT 7HD/2FD KIT	$139
1542CF	BUS MASTER COMPLETE KIT	$238
1542C+	BUS MASTER KIT WITH COREL SCSI	$314
1640	MICROCHANNEL FOR PS/2, 7HD	$319
2742	**EISA KIT, 14HDS**	**$299**
2742W	Fast Wide SCSI EISA	$339
2842VL	**Fast SCSI-II VESA**	**$239**
APA-460	Slim SCSI PCMCIA SCSI Card	$289
AHA-2940	PCI SCSI MASTER RISC-BASED I/O	$279
AMM-1570	**FULL SCSI WITH ADVANCED AUDIO**	**$319**

DATA TECHNOLOGY CORPORATION

SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
DTC3270VL	32-Bit VESA 7SCSI/2FD SCSI	$125
DTC 3280AS	16-Bit ISA to SCSI Host Adapter	$104
DTC3280AS	EISA to SCSI 32-Bit Host w/Cache	$499

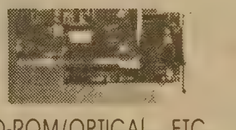
American Megatrends



SCSI CONTROLLERS

DESCRIPTION	PRICE
FastDisk NC EISA non-cache SCSI cont.	$295
FastDisk EISA Caching Controller up to 16MB	$389
FastDisk VLB VESA Local Bus Caching Controller	$393
FastLAN SCSI	$439

TRANTOR®



FULL KITS W/DRIVERS FOR CD-ROM/OPTICAL... ETC.

SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
T228	MICROCHANNEL, 7HD	$139
T338	PARALLEL PORT to SCSI ADAPTER	$99
T348	PARALLEL PORT to SCSI PLUS	$149
T358	Parallel Port to SCSI Plus Enhanced	$189

TRANTOR SCSI Works
ASPI Device Drivers For:
CD-ROMs, Photo CD, Tape Drives, Syquest, Opticals, Scanners, Hard Drives
TAPEMATE II Back-up software & Music Box-Audio CD Software

$59

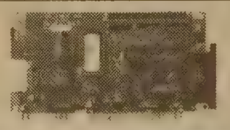
aaa always technology

Easiest to use, PLUG & PLAY with CD Drivers

SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
IN2000	16 BIT 7HD/2FD "Easiest to use"	$175
IN2000PRO	With COREL SCSI	$215
AL1000	SCSI To PARALLEL	$159
AL1000PRO	Above With COREL SCSI	$185

FUTURE® DOMAIN



SCSI CONTROLLERS

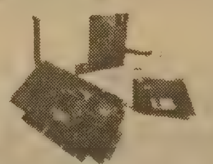
MODEL	DESCRIPTION	PRICE
TMC850	8-BIT W/BIOS	$59
TMC1670	SVP 16-BIT SCSI VALUE PACK	$149
TMC1680	SVP 16-BIT VALUE PACK 7HD/4FD	$139
SCSI2GO	PCMCIA FAST SCSI-II TYPE II	$279

Acculogic

SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
20	PCI SCSI Host Adapter, Sup. Wide SCSI-3	$219

BUSLOGIC



SCSI CONTROLLERS

MODEL	DESCRIPTION	PRICE
BT545S	ISA Bus Master Fast SCSI Adapter Kit	$208
BT445S	**Bus Master Fast SCSI Kit for VL Bus**	**$199**
BT742A	EISA Bus Master SCSI-II Adapter Kit	$329
BT747S	EISA Bus Master Fast SCSI	$364
BT757S	FASTWIDE SCSI CARD	$369
BT946C	Bus Master Fast SCSI for PCI Local Bus	$239

ADVANSYS.

SCSI-2 VL BUS MASTER

- 32-bit, 120MB/sec. burst mode
- 10MB/sec. synchronous on Fast SCSI
- SCSI II, Bus Master DMA

SCSI CONTROLLERS

AdvanSCSI *Gold Network* Kit

- ABP-842 VL to SCSI 2 host adapter with floppy controller
- AdvanWare configuration/installation software
- COREL SCSI Network manager
- NOVELL NetWare Utilities for RAID 4 & 5
- Internal ribbon cable, VHS video installation guide
- User's manual

$399

AdvanSCSI *Silver Multi-Media* Kit

- ABP-842 VL to SCSI 2 host adapter with floppy controller
- AdvanWare configuration/installation software
- COREL SCSI Version 2
- Internal ribbon cable, VHS video installation guide
- User's manual

$249

IDE CONTROLLERS

NCA'S STANDARD IDE

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
200	2HD/2FD CONTROLLER W/CABLES	$14
211	2HD/2FD W/2 SERIAL, 1PAR, 1GAME	$23
NCL53	SMART CONT. W/BIOS EASY INSTALL	$49
223	**2HD/2FD for VESA LOCAL BUS I/O**	**$59**

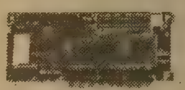
15C CACHING (UP TO 8MB), 2HD, 2FD **UltraStor** **$159**

BUSLOGIC

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
BT510A	IDE Cache Contoller For PC/AT Sys.	$95
BT410A	IDE Cache Controller for VLB	$129
BT910A	IDE PCI Cache Controller	$139

PROMISE TECHNOLOGY,INC.



IDE CACHING CONTROLLERS

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
DC-200	ISA IDE 4HD/2FD, 2.88MB FLOPPY SUPPORT	$89
DC-420VLB	VESA IDE 512K CACHE	$99
DC-4030VL-2	VESA IDE 2.88MB SUPPORT 4HD/2FD	$109
DC-200M	ISA IDE 512K CACHE 4HD/2FD 2.88 SUPPORT	$119
DC2032	ISA Caching Controller	$139

DATA TECHNOLOGY CORPORATION

IDE CONTROLLERS

MODEL	DESCRIPTION	PRICE
DTC 2278AS	VESA Multi I/O 2s/1p/1g	$39
DTC2277VLL	VESA Caching IDE Controller	$149
DTC 2280	16-Bit Super I/O 2FD/2HD 2s/1p/1g	$19.99

WONDER 16550 IDE CARD

2 IDE DRIVES/2 FLOPPY
2 HIGH SPEED 16550 SERIAL PORTS
1 PARALLEL PORT / 1 GAME

$69

16650 I/O Controller......$45

PORT-FOLIO 16550

13-Port Super I/O Card

4 INTEGRATED NS16550 HIGH SPEED UARTs

- 2 IDE HD • 4 Floppy
- 2 Parallel • 4 Serial
- 1 Game

QUICKPATH

$129

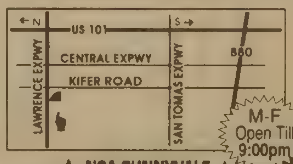
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

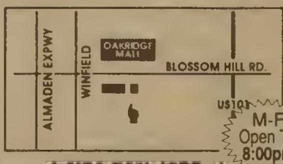
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

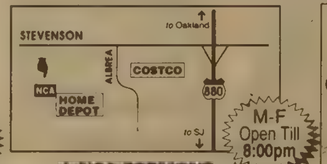
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

AUTHORIZED NEC RESELLER

NEC

MONITORS

2V
'4", .28mm
)24X768
'on-Interlaced
lat Screen

SAVE $25

$299*

*Price After Instant Rebate

3V
5", .28mm
)24X768
on-Interlaced
lat Screen

SAVE $40

$415*

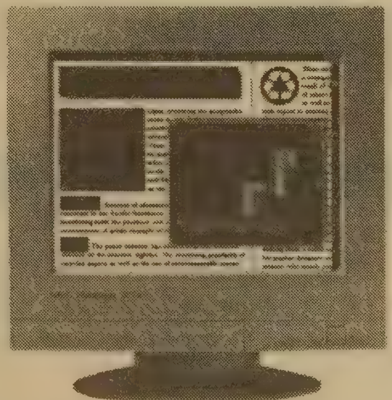
*Price After Instant Rebate

3FGe
5", .28mm
)24X768
GA-2
ompatible

$549

4FGe
5", .28mm
)24X768
nti-Static
lat Screen

$629



5FGe
- 17", .28mm
- 1024X768
- 76Hz Refresh

$945

5FGp
- 17", .28mm
- 1280X1024
- Opticlear

$1075

6FGp
- 21", .28mm
- 1280X1024
- Opticlear

$1999

NOTEBOOKS

NEC

VERSA E75 Active Color NOTEBOOK
486DX2/75MHz 340MB/4MB RAM

- SL Enhanced i486™ DX2
- 8Kb Cache
- Built-in Numeric Co-Processor
- 4MB RAM (exp. to 20MB)
- 2 PCMCIA Slots
- TFT Active-Matrix Color Screen
- User Removable/Reversable Screen
- MS-DOS, Windows Preloaded
- 3 Yr. Warranty

LOWEST PRICE GUARANTEE*

VERSA E40 Active Color NOTEBOOK
486DX2/40MHz 250MB/4MB RAM

- SL Enhanced i486™ DX2
- 8Kb Cache
- Built-in Numeric Co-Processor
- 4MB RAM (exp. to 20MB)
- 2 PCMCIA Slots
- TFT Active-Matrix Color Screen
- User Removable/Reversable Screen
- MS-DOS, Windows Preloaded
- 3 Yr. Warranty

LOWEST PRICE GUARANTEE*

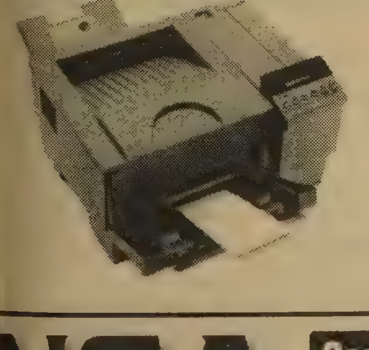
VERSA E50 Active Color NOTEBOOK
Available in 209MB and 340MB.

FOR ALL YOUR NEC VERSA NEEDS CALL NCA...

NEC
SCSI CD ROMs

3Xi Internal SCSI CD ROM 450Kb/Sec. Transfer Rate 190ms Seek Time	**$429**
3Xe External SCSI CD ROM 450Kb/Sec. Transfer Rate 190ms Seek Time	**$479**
3Xp Portable SCSI CD ROM 450Kb/Sec. Transfer Rate 240ms Seek Time	**$389**
4X PRO External SCSI CD ROM 600Kb/Sec. Transfer Rate 180ms Seek Time	**$849**

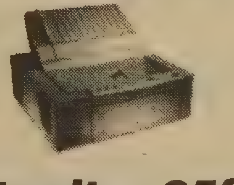
PRINTERS



Silentwriter 1097
600 DPI Postscript

- 10ppm, 600dpi laser quality
- 7MB RAM
- Level 2 PostScript/PLC-5
- 35 resident Adobe scalable
- 14HP LaserjetIII fonts

$1359



Silentwriter 95fx
- Fax Capability
- 6ppm
- 300dpi laser quality
- 2MB memory expandable to 5MB
- Envelope Feeder
- 35 resident Adobe Scalable Fonts
- Apple Talk built in

$949

Silentwriter 610
- 6ppm
- 300dpi laser quality
- Uses Memory from system CPU
- 14 Window True Type Fonts
- 20 NEC True Type Fonts

$489

Silentwriter 640
- 6ppm
- 300dpi laser quality
- 3MB RAM
- Level 2 Postscript
- 17 resident Adobe scalable
- 35 True Type Fonts

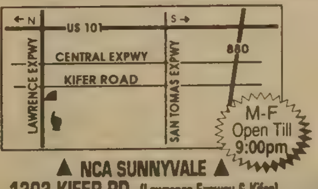
$649

NCA Computer Products™
our Computer Upgrade SUPERMARKET™

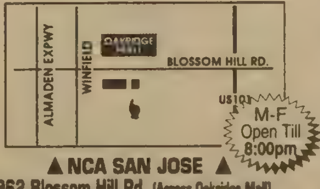
COVER AMERICAN EXPRESS VISA PURCHASE ORDERS

Sale Ends 9/18/94

SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610

STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

ST PRICE GUARANTEED* OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

VIDEO CARDS

miro

Graphics Power for Winners!

GERMAN ENGINEERED VIDEO ACCELERATOR CARDS.

miroCrystal 10SD

- S3 86C805 Graphics Chip with 1MByte Highspeed DRAM
- 256 Colors with 1024X768
- Top Resolution of 1280X1024
- 80Hz at 1024X768 Pixels
- VLB, PCI

$139 VLB

$149 PCI

miroCrystal 16SI

- GRAPHICS Chip S3 86C805i with 2MBytes DRAM
- 256 colors with 1408X1024 Pixels
- Top Resolution of 1408X1024
- 100Hz at 1024X768 Pixels
- VLB, PCI

$219 VLB

$229 PCI

miroCrystal 20SD

- Graphics Chip S3 Vision864™ with 2MBytes DRAM
- 65,536 Colors in 1024X768 pixels mode
- Top Resolution of 1408X1024
- 100Hz at 1024X768 Pixels
- VLB, PCI

$249 VLB

$259 PCI

miroCrystal 20SV

- Graphics Chip S3 Vision964™ with **2MBytes VRAM**
- 65,536 Colors in 1024X768 pixels mode
- Top Resolution of 1408X1024
- 100Hz at 1024X768 Pixels
- VLB, PCI

64-BIT!

NEW!

MANUFACTURED IN GERMANY!

$399 VLB

$409 PCI

miroCrystal 40SV

- Graphics Chip S3 Vision964™ with **4MBytes VRAM**
- 16.7 million Colors in 1152X864 pixels mode
- Top Resolution of 1408X1024
- 100Hz at 1024X768 Pixels
- VLB, PCI

64-BIT!

NEW!

MANUFACTURED IN GERMANY!

$599 VLB

$609 PCI

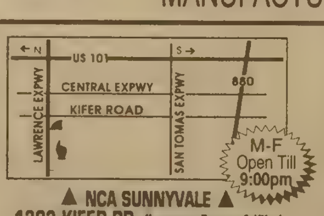
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

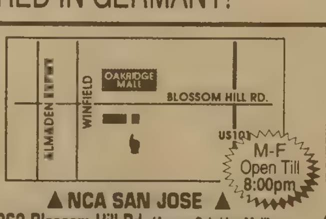
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

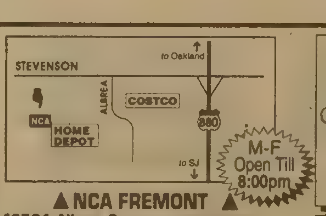
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS


← N
US 101
S →
LAWRENCE EXPWY
CENTRAL EXPWY
KIFER ROAD
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610


STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED' OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

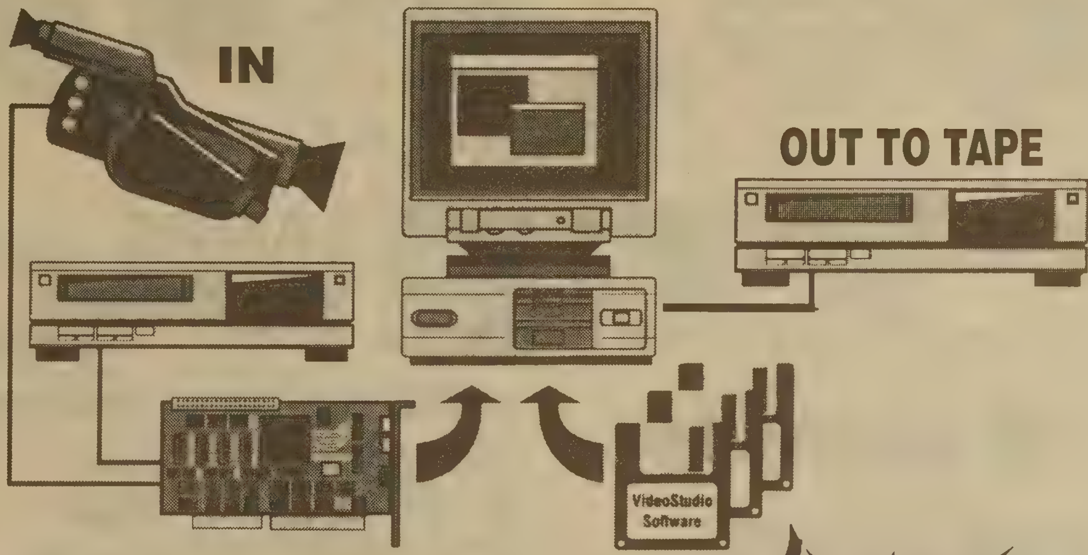
Video Capture Board

miro

miroVIDEO DC1 tv

ideo Digitizing Directly To Your Hard Disk • Overlays, Titles, Special Effects • Super VHS Quality, PAL/NTSC Video Output

Miro's DC1 tv Video Capture Board Delivers Full Screen 640X480 Full Motion 30fps Video Capture And Non Linear Audio & Video Editing To The Personal Computer At A Remarkable Price!


IN
OUT TO TAPE
VideoStudio Software

VideoStudio Software:

- Video Capture
- Video Editor
- iPhoto plus

Hardware Highlights:

- Supports all video formats
- Adjusts video filter
- on-board Motion JPEG compressor
- Digital video encoder
- Compatible with all graphics boards

State-Of-The-Art Features:

Non-linear video editing on any Windows PC
Only One VCR for recording & playback
Instant access to any frame
Great transition effects
Digital video back up
No generation loss

PROFESSIONALS DREAM!!!

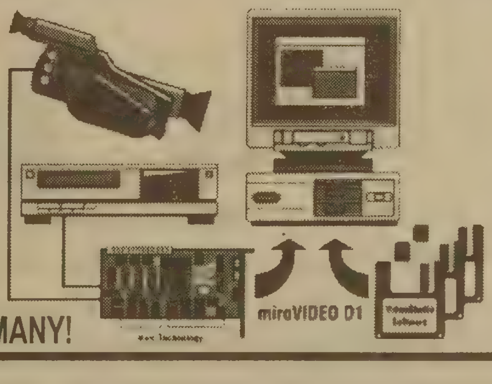
$999

MANUFACTURED IN GERMANY!

Video D1

ow experience digital video on any Windows PC
pectacular transition effects, Normally only available to video professionals
antastic multimedia impression, Integration of full motion video, titles and ictures adds a new dimension to personal computing
Hours of fun - pictures, clips and tricks combined with creativity lead to a hrilling adventure in motion and colors

MANUFACTURED IN GERMANY!


miroVIDEO D1
VideoStudio Software

- Video Capture
- Video Editor
- Photo Plus
- HARDWARE HIGHLIGHTS:
- Supports all video standards
- Adjustable video filters
- miroVIDEO XL compressor
- 16.7Million colors compatible

SUPER VALUE!

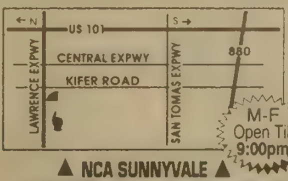
$249

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

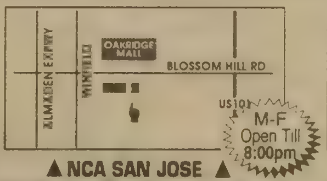
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

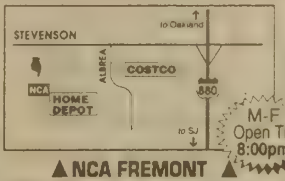
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS


← N
US 101
S →
LAWRENCE EXPWY
CENTRAL EXPWY
KIFER ROAD
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610


STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA
CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

WEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantibes on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

VIDEO MONITORS

MORE

ViewSonic®

State of the Art

ViewSonic-15EX

- 15" RGB Color Monitor
- 1024X768
- Non-Interlaced

$369

ViewSonic -15 1280 X 1024	**$439**
ViewSonic-15E 1024 x 768	**$359**

ViewSonic-17

- 17" RGB Color Monitor
- 1280X1024 , .27dpi
- Non-Interlaced
- Flat Screen

$899

ViewSonic -17G 1280 X 1024	**$765**

ViewSonic-20

- 20" RGB Color Monitor
- 1280X1024, .28dpi
- Non-Interlaced
- Dual Page Display

$1449

ViewSonic-21

- 21" Color Monitor
- 1600X1280
- .31dpi
- Non-Interlaced

$1695

HITACHI®

SuperScan™ 15s

- 15" SVGA, Non-interlaced
- 1280X1024, .28dpi
- Flat Screen

$429

SuperScan™ Elite 17

- 17" SVGA Non Interlaced
- 1600X1200, .26dpi
- Flat Screen

$979

SuperScan™ 20S

- 20" SVGA Non-Interlaced
- 1280X1024, .31dpi
- Flat Screen

$1225

SuperScan™ Pro21: 21" SVGA (NI) 1600X1280, .28dpi	**$1999**

NOKIA

Engineered in Europe for the World

Workstation & CAD Quality Monitors

- Autosync
- Digital Controls with Menu
- Full Screen Power Save
- MicoEmission

449E 15" Non-Int. 1024X768, 80Hz refresh	**$489**
447B 17" Non-Int. 1280X1024,110Hz refresh	**$939**
447X 17" Non-Int. 1600X1280	**$1089**
445M 21" Non-Int. 1280X1024,120Hz refresh	**$1999**
445X 21" Non-Int. 1600X1280,120Hz refresh	**$2495**

NEC

OptiClear

MultiSync Monitors

SEE PAGE 17

SAMPO

KDM-1566

energy

- 15" Autosync Color Monitor
- 1280X1024
- .28mm, Flat Screen

$399

20" Non-Int. SVGA 1280X1024 .31mm	**$1259**

MiTAC

Affordable Quality Monitors

15" Performance

- 1280X1024,
- .28dpi
- Non-interlaced
- Flat Screen
- M1564PD

$339

17" SVGA

- 1600X1280
- .26dpi
- Non-interlaced
- "The Green Monitor"
- **Low Radiation**
- L1564PD

$699

MAG INNOVISION

DX15F 15" Non-Int. 1280X1024, .28mm	**$369**
DX17F 17" Non-Int. 1280X1024, .28mm	**$669**
MX15FG 15" Non-Int. 1280X1024 LOW RADIATION	**$459**
MX17FG 17" Non-Int. 1280X1024, LOW RADIATION	**$849**

NANAO®

PROFESSIONAL VIDEO DISPLAY

NEW!

F340iw 15" Non-Int. 1024X768, Flat Screen	**$659**
F550i 17" Non-Int. 1280X1024, .28dpi	**$839**
F550iw 17" Non-Int. 1280X1024, .28dpi	**$925**
F560iw 17" AKA: the "Green Monitor"	**$1159**
T560i 17" Non-Int. 1280X1024, .25dpi	**$1395**
T660i 20" Trinitron Tube 1280X1024, .31dpi	**$2095**
F760i 21" 1280X1024, .31dpi	**$1885**

NCA

Quality SVGA Monitors

14" Non-Int. SVGA 1024X768 .28dpi	**$259**
15" Non-Int. SVGA 1280X1024.28 Flat	**$339**

SONY

GPD-15SF

- 15" Color Monitor
- Max Res. 1280X1024 .25dpi
- Non-Interlaced

$489

GDM-17SE1

- 17" Color Monitor
- Max Res. 1280X1024 .25dpi
- Non-Interlaced

$989

GDM2038

- 20" Color Monitor
- State of the art
- 1280X1024 @ 72Hz
- .30dpi
- Non-Interlaced

$1879

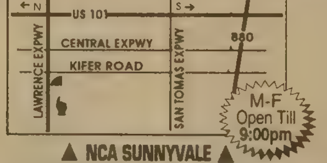
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

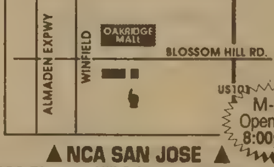
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

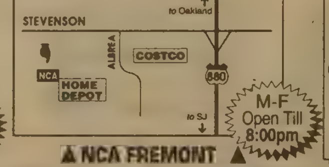
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA *CORPORATE*
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

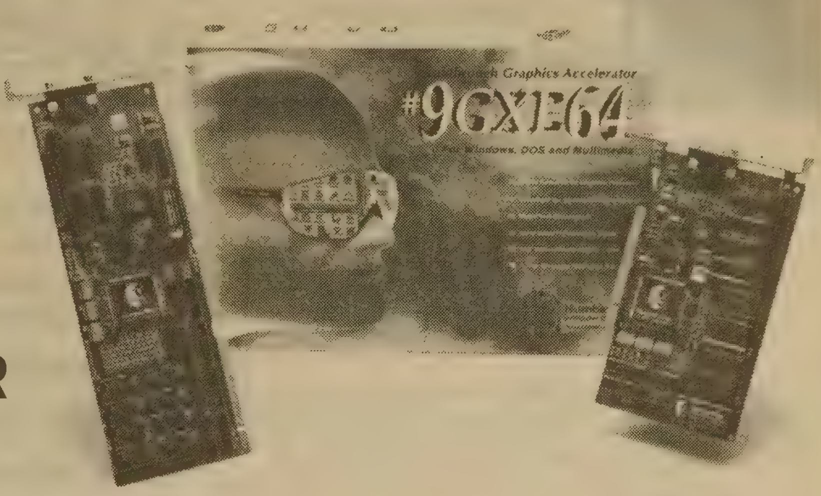
MAIL ORDER DEPT.
***Call* (408) 522-3050**

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

VIDEO GRAPHIC CARDS

Number Nine
Computer Corporation
Excellence in PC Graphics


#9GXE64
Graphics Accelerator
For Windows, DOS and Multimedia

#9GXE64

BREAKTHROUGH GRAPHICS ACCELERATOR FOR WINDOWS, DOS & MULTIMEDIA

- 64-Bit S3-864 Graphics Processor
- Up to 1280X1024 at 74Hz
- Up to 800X600 with 16.7 million colors
- ZereoFlicker™ refresh rate to 120Hz
- VESA 26-pin multimedia feature connector
- High Speed 64-bit non-interleaved DRAM
- Field upgradeable to 2MB
- Hawkeye For Windows Advanced Display Utilities

PCI or VLB Version

1MB **$179**

2MB **$249**

#9GXE64 Pro

PROFESSIONAL 64-BIT VRAM ACCELERATOR FOR WINDOWS, CAD & MULTIMEDIA

PCComputing HARDWARE 200 1994 FINALIST

1994 WIN AWARD W 100 WINDOWS MAGAZINE

- 64-Bit S3-964 Graphics Processor
- Up to 1152X864 with 16.7 million colors
- Up to 1600X1200 Non-interlaced
- ZereoFlicker™ refresh rate to 120Hz
- VESA 26-pin multimedia feature connector
- High Speed 64-bit non-interleaved DRAM
- Field upgradeable 64-bit VRAM to 4MB
- Fastest VGA in the world jacks games into real-time
- Hawkeye For Windows Advanced Display Utilities

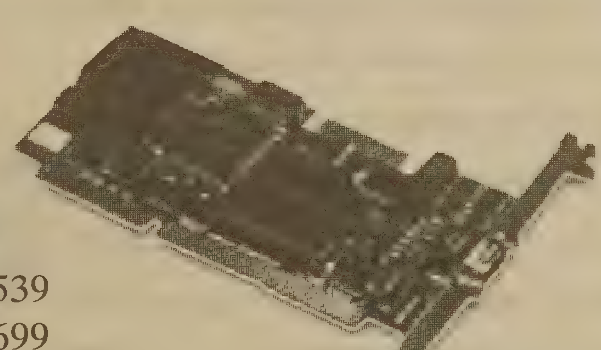
PCI or VLB Version

2MB **$359**

4MB **$529**

9GXe World's Fastest Graphics Accelerator Engine 86C928 Chip Based

9GXe Level 10 ISA 1MB VRAM	$255
9GXe Level 11 ISA or VESA 2MB VRAM	$349
9GXe Level 12 ISA or VESA 3MB VRAM	$413
9GXe Level 14 ISA	$599



9GXi Graphics Powerhouse Bases on Ti TMS 34020

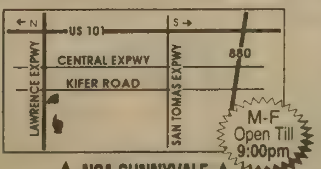
9GXi Lite Level 20 1MB VRAM	$539
9GXi Lite Level 21 1MB VRAM /1MB DRAM	$699
9GXi Level 23 ISA or MCA 1MB VRAM/1MBDRAM	$999
9GXi Level 25 ISA or MCA 2MB VRAM/1MB DRAM	$1269
9GXi Level 29 4MB VRAM 1MB DRAM	$1389
15-PIN TO 5BNC MONITOR CABLE	**$89**

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

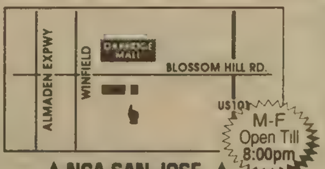
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

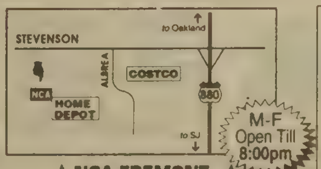
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS


N
S
US 101
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420


ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610


STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

VIDEO CARDS

MORE

Hercules *The Fastest Real-World Windows Accelerator*

Dynamite
SuperVGA and Windows Accelerator

Hercules Picture Windows display lets you change your Windows display setting with a click of a mouse!

D301	Dynamite Pro 1MB DRAM ISA Bus	$169
D302	Dynamite Pro 2MB DRAM ISA Bus	$219
D601	Dynamite Pro 1MB DRAM VLB	$169
D602	Dynamite Pro 2MB DRAM VLB	$229
D702	Dynamite Power 2MB DRAM VLB	$249
D902	Dynamite Power 2MB DRAM PCI	$249

Blazing 32-Bit Accelerator for Windows and AutoCAD High Refresh Rate - Dual Ported VRAM. 2-Year Warranty

HG210	Graphite Card 1MB VRAM ISA Bus	$209
HG310	Graphite Pro 1MB (exp. -2MB) ISA	$269
HG420	Graphite Pro 2MB ISA Bus	$399
HG610	Graphite VL Pro 1MB (Ex.2MB)VLB	$239
HG720	Graphite VL Pro 2MB VLB	$399
PG310	Graphite Power 1MB ISA	$249
PG420	Graphite Power 2MB ISA	$369
PG610	Graphite Power 1MB VLB	$249
PG720	Graphite Power 2MB VLB	$359

NEW! **STINGRAY**

S501	Stingray VLB 1MB DRAM	$149
S801	Stingray PCI 1MB DRAM	$149

MATROX MGA POWER GRAPHICS

HIGH-PERFORMANCE GRAPHICS ACCELERATOR

Revolutionary 64-Bit Architecture - DynaView 2D & 3D - Refresh Rate Up To 80Hz.

MGA Ultima VLB 2MB 1600X1200 Capability	$429
MGA ULT2AH/AH VLB OR ISA 2MB 1600X1200 Capability	$499
MGA IMP3AH Impression AT 3MB 1600X1200 Capability	$699
MGA IMP3V Impression VLB 3MB 1280 x 1024 at 24-bit	$739
MGA IMP 3VH Impression 3MB 1600X1200 Capability	$799
MGA PCI/2 2MB up 1280 x 1024	$399
MGA PCI/2 Plus 2MB 1600X1200 (upgradable to 4MB)	$429
MGA VLB Plus 2MB1600 X 1200	$459

Number Nine
Computer Corporation
Excellence in PC Graphics

9GXe World's Fastest Graphics

SEE PAGE 21

SPiDER®
Graphics, Inc.

SEE PAGE 24

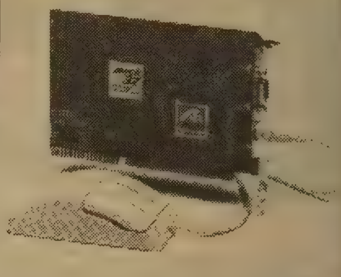
American Megatrends

Fast View VLB 2MB Win. Accel. Card .. $359

Genoa
SYSTEMS CORPORATION

8500VL turbo	$109
Phantom 32i 2MB	$179
Phantom 32i PCI 2MB	$199
Phantom 64	CALL
Windows VGA64	CALL

ATI TECHNOLOGIES INC.



Graphics Wonder, *Graphics Accelerator*

1MB VRAM, up to 16.7Million Colors, up to 1280X1024, 76Hz Flicker free Display ISA/VESA **$159**

Graphics Ultra Pro ISA or VLB

2MB VRAM, NI 1280X1024, Accelerated 65,000 Color Graphics Plus True-Color, 76Hz Flicker-Free Display, Zero wait-state VGA **$279**

Grapihics Ultra Pro Turbo 64

2MB VLB/PCI	$379
4MB VLB/PCI	$599

MediaMerge

Complete Video Editing Software For Windows Includes: Scene Editor, Text Editor, Audio Editor, Story Editor, Media Player, Transition Effects **$155**

Graphics Ultra Pro EISA	$329
Graphics Pro PCI	$299
Graphics Ultra+ with Mouse	$215

MEDIA VISION

ProGraphics 1024

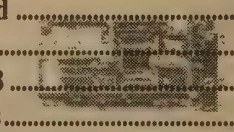
True 1024X768 windows accelerator, 16.7 Million Colors, Multimedia Upgradeable, Fast film accelerated movie playback, MVV452, 72-Bit processor engine.

16.7Million Color VLB	$309
256Color VLB	$239

ProGraphics 1280 VLB

True 1280X1024 VLB, 4MB VRAM Standard, 24-bytes/pixel, 16.7Million True Colors, MVV451 Graphics Processor **$399**

SVGA VIDEO CARDS



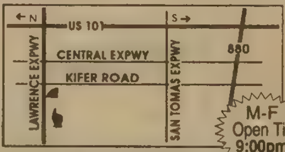
SVGA 256K Video Card	$24.99
SVGA 512K 1024X768	$34.99
SVGA 1024K 1024X768	$59.99
SVGA VESA Local Bus	$69.99

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

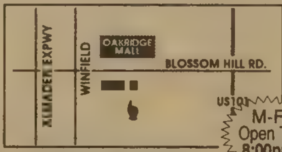
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

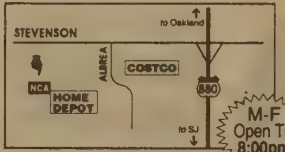
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

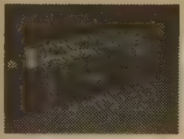
©1994 INVERSE CORPORATION

BEST NAMES

ORCHID

Video Cards

Fahrenheit 1280° Plus



ISA or VLB

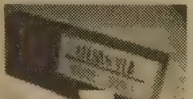
High Resolution Graphics Accelerator

1MB	2MB
$139	$189

Fahrenheit VA/VLB........................1MB/$159: 2MB/$209

Celsius/VLB

up to 1600X1200 Resolution / up to 100Hz Refresh RateWindows and CAD Accelerator.



1MB	2MB
$179	$229

Kelvin 64

64-Bit Windows Graphics Accelerator

PCI or VLB

1MB 64-Bit	$159
2MB 64-Bit	$229

Kelvin EZ

32-Bit Windows Graphics Accelerator

PCI or VLB

1MB 32-Bit	$139

ORCHID

Multimedia

SoundWave 32+SCSI

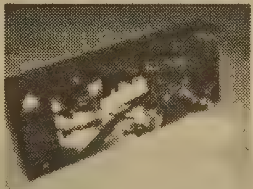
16-Bit Sound Card W/Digital Signal Processing

$199

GameWave 32

Multimedia Ready Wave Table Sound Card

$119



SoundWave 32 *Advanced Wave Table/DSP 16 bit Sound Card*	$179
Vidiola *Video capture, edit and playback Solution*	$349
Vidiola PRO/D	$539
Vidiola PREMIUM Video output	$699

Accelerator Cards

DIAMOND *Accelerating in Graphics and Multimedia*

***Stealth 64* (PCI OR VLB)**	
2MB	*$339*
4MB	*$469*
***Stealth 24* (VLB OR ISA)**	*$139*
Viper Pro	
4MB VRAM/Scalable Video Playback	***call for best price***
Viper VLB *with 2MBVRAM*	*$319*
Viper PCI *with 2MBVRAM*	*$359*
Stealth 32 *VESA or PCI*	
1MB/2MB	*$169/$229*
Stealth Pro *VESA or ISA*	
1 MB VRAM	*$219*
2 MBVRAM	*$309*
SpeedStar Pro	
1 MB DRAM	*$129*
Sonic Sound *Now Includes 7th Guest CD Rom*	*$199*
Sonic Sound LX	*$129*
VideoStar Capture Board	*$329*
VideoStar Pro	*$489*

OKIDATA®

Printers

LED PRINTERS

OL-400e

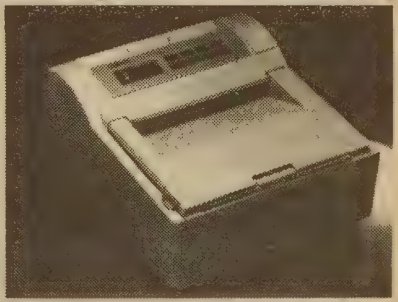
- 4ppm, 300dpi laser quality
- RISC Processor
- 44 built-in fonts
- Sleek compact design
- 5 year printhead warranty

$479

OL-410e

- 4ppm, 600dpi laser quality
- RISC Processor
- 44 built-in fonts
- PCL5 Emulation
- 5 year printhead warranty

$645



DOT MATRIX PRINTERS

PROFESSIONAL BUSINESS PRINTERS

ML-320 9-PIN /80 COLUMN	$299
ML-590 24-PIN /80 COLUMN	$425

NEC *AUTHORIZED NEC RESELLER*

COMPLETE LINE OF PRINTERS ON PAGE 17

Full Line of HP Printers Available

HEWLETT PACKARD

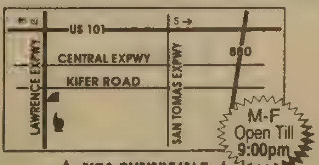
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

PURCHASE ORDERS

Sale Ends 9/18/94

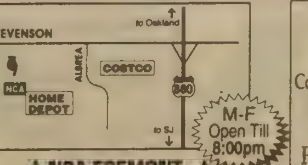
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

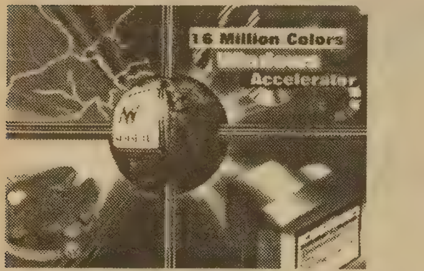
* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

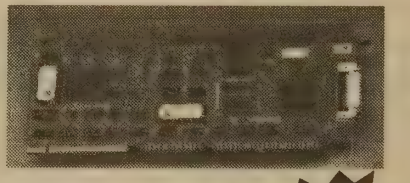
BRAND NAMES

MORE

SPiDER®
Graphics, Inc.



SPiDER Windows Accelerators
16.7 Million Colors



TARANTULA 64 VLB/PCI

NEU!

NEXT GENERATION 64-BIT GRAPHICS

- 32-Bit True Color Palette DAC
- Up to 1600X1200 in 64K Colors
- True Color at 1024X768 N/I
- Energy Saving Green PC
- Virtual Screen, Resolution & Refresh on-the-fly

2MB VRAM	4MB VRAM
$285	$395

BLACK WiDOW Plus

The Power of Graphics Co-Processor

- IIT AGX-016: Co-Processor Accelerator
- Fast VRAM
- 135MHz High Color DAC up to 90Hz (NI)
- Ultra High Resolution 1600X1200
- Virtual Screen, Adjust Screen, Refresh Rate Check

1MB VRAM	2MB VRAM
$169	$239

SPiDER 256 CACHE

A Breakthrough in video Technology: Video Caching!

- 128KB Video Cache (exp. 256KB)
- 32-Bit VESA VL-Bus
- Hardware Cursor & Line Drawing, BitBlt
- 1MB of Display memory (exp. 2MB)
- 16 Million Colors
- Up to 1280X1024 in 256 colors
- Refresh Rate up to 75Hz (NI)
- Virtrual Screen, Adjust Screen and Refresh Rate Check

1MB DRAM w/128C	2MB DRAM w/256C
$129	$189

SPiDER 64VLB/PCI

64-Bit Video Accelerator Card

- 64-Bit video memory interface
- 64-Bit BitBlt
- 16 Million Color in 32-Bit/Pixel format
- 1024X768 in 16 Million Colors ; 1280X1024 in 64K Colors
- High Refresh Rate: up to 75Hz (NI)
- Display memory Expandable up to 4MB
- Virtual Screen, Adjust Screen and Refresh Rate Check
- Bus available: VESA VL-Bus and PCI

2MB DRAM	4MB DRAM
$199	$299

SPiDER 32VLB
1MB DRAM/2MB DRAM ....$95/$135
SPiDER 32VLB Plus
1MB DRAM/2MB DRAM ....$109/$149
BLACK WiDOW VLB/ISA
1MB VRAM/2MB VRAM ....$139/$199

QUICKTAPE 250

250MB EXTERNAL PARALLEL PORT TAPE BACKUP

NEU!

Perfect for notebooks & portables!

SUPER FEATURES:
- 4.2MB/MIN.W/O COMPRESSION
- 8.4MB/MIN W/ COMPRESSION
- USES DC2120 TAPES
- 100% QIC 80 COMPATIBLE
- INCLUDES DOS SOFTWARE

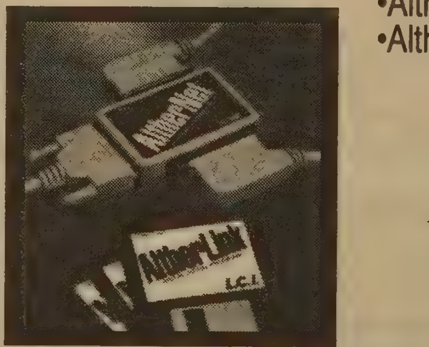
ALL THIS FOR ONLY... $269

ALTHERNET

SMALL OFFICE LAN SOLUTION

Includes everything you need to connect 2 systems together for file & printer sharing!

- Althernet LCI 2000 series unit
- 3 10ft. parallel printer
- AltherLink Windows for Workgroups
- AltherNet DOS bonus disk



$119

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

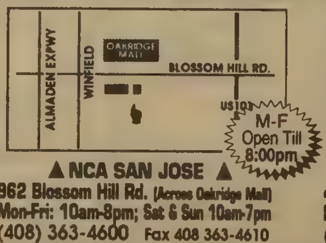
DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

Sale Ends 9/18/94

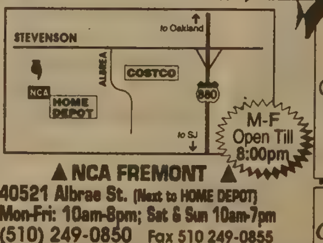
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS

← N
US 101
S →
CENTRAL EXPWY
KIFER ROAD
880
LAWRENCE EXPWY
SAN TOMAS EXPWY
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expwy & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED* OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

TAPE BACK-UP

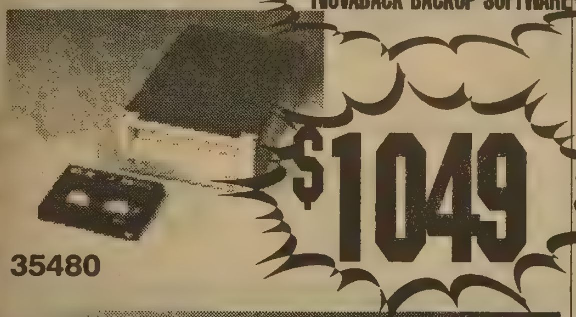
MORE

HEWLETT PACKARD

The most reliable SCSI Tape Backups for MAC, PC or SUN

5GB External 4mm 3.5" SCSI DAT TAPE BACKUP

- •732 Kbytes/Sec Transfer Rate (Sustained)
- • 5 MB/ Sec (Synchronous)



INCLUDES: 1 CARTRIDGE & NOVABACK BACKUP SOFTWARE

$1049

35480

SCSI 4mm DAT

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.0GB	35470 DAT	$889	$999
4-8GB	35480 DAT	$977	$1047
4-16GB	C1533A	$1249	$1359

EXABYTE®

FS1G

1.5 GB SCSI Tape Storage

COMPLETE SYTEM INCLUDES:

- •Internal FS1G Tape Drive
- •Adaptec 16-Bit SCSI Controller Card
- •File Secure Software
- •Up to 30 MB/Min. Transfer Rate
- •One Data Cartridge

$729

External FS1G Kit...$898
Internal Unit (2501) $519

4mm DAT Cartridge

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.0GB	EXB-4200	$849	$959
4-8GB	EXB-4200C	$949	$1039

2.5 GB 8mm DAT Subsystem

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.5GB	EXB-8205	$1399	$1649

5 GB 8mm DAT Subsystem

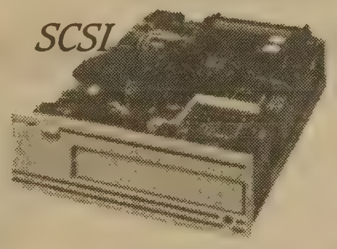
CAPACITY	MODEL	INTERNAL	EXTERNAL
5.0GB	EXB-8505	$2069	$2499
5.0GB	EXB-8500	$2299	$2599

CONNER *The BEST name in SCSI Back-up Drives*

SOF•STOR

for IBM Compatibles, MAC, SUN, & NeXT

Formerly ARCHIVE



SCSI

ANACONDA™

- ◆ 36MB/MIN
- ◆ SCSI-2
- ◆ 1/4" TAPE UNIT

1.3GB 2750		2.0GB 2800	
INTERNAL	$799	INTERNAL	$999
EXTERNAL	$899	EXTERNAL	$1099

VIPER™

- ◆ 6MB/MIN
- ◆ SCSI
- ◆ 1/4" TAPE UNIT

250 MB 2150S		525 MB 2525S	
INTERNAL	$317	INTERNAL	$424
EXTERNAL	$424	EXTERNAL	$559
Int. W/Software	$399	Int. W/Software	$549

SCSI 4mm DAT Tape Backups

PYTHON™

- ◆ 11MB/MIN.
- ◆ 1MB Cache Buffer

2 GB. 4320 NT		4 GB. 4324 TURBO	
INTERNAL	$879	INTERNAL	$1049
EXTERNAL	$989	EXTERNAL	$1149

COLORADO MEMORY SYSTEMS INC.

Uses 2120 Tapes

RUNS OFF FLOPPY PORT

CAPACITY	MODEL/TYPE	INTERNAL
120MB	DJ10 JUMBO120	$99
250MB	DJ20 JUMBO250	$159

EXTERNAL KIT WITH CARD AND CABLES KE-10	$109
EXTERNAL TAPE PORT AB-11	$35
FC-10 TAPE CONTROLLER, WITH CABLES	$78
TC-15 HIGH PERFORMANCE 16-BIT CONTROLLER	$168

WangDAT™

Internal

4-8GB $999

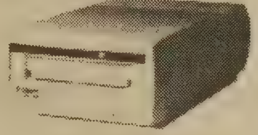
3400DX DAT Tape Backup

External $1099

SCSI 4mm DAT

CAPACITY	MODEL	INTERNAL	EXTERNAL
2.0GB	3100 DAT	$899	$999
4-8GB	3200 DAT	$999	$1099

Trakker



PARALLEL PRINTER PORT EXTERNAL TAPE BACK-UP SYSTEMS

RUNS OFF PARALLEL PRINTER PORT

CAPACITY	MODEL/TYPE	EXTERNAL
120MB	TRAKKER 120	$279
250MB	TRAKKER 250	$317

POWERTAPE 2GB $899

2GB External Tape Backup system

WANGTEK

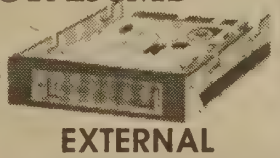
SCSI Tape

CAPACITY	MODEL	INTERNAL	EXTERNAL
250MB	5150S	$399	$499
525MB	5525S	$539	$649

CONNER

TAPE•STOR 250MB

TAPE BACKUP
INCLUDES 1 CARTRIDGE



INTERNAL	EXTERNAL
RUNS OFF FLOPPY PORT	RUNS OFF PARALLEL PORT
$149	$299

backpack

Tape Drive

Parallel Port 250MB External Tape Backup

- ▶ QIC 80 uses 2120 tapes
- ▶ Software for unattended backups
- ▶ Twice as fast as internal floppy drive
- ▶ Window and DOS Software Included
- ▶ 2 Year Warranty

$339

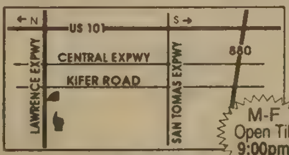
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

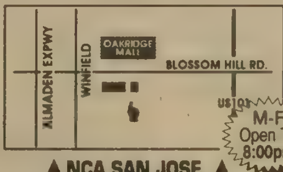
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

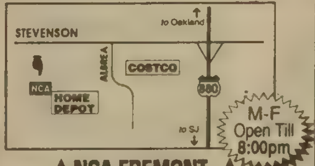
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expwy & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

REMOVABLES

MORE

OPTICALS

HEWLETT PACKARD

1.3GB Multifunction Rewritable & WORM Drive

- HP C1716T
- SCSI-2 1.3GB

INTERNAL $2399

EXTERNAL C2550 WITH CARTRIDGE $2799

1.3GB Cartridge........................$129

RICOH

128MBYTE, 3.5" SCSI-II REWRITABLE OPTICAL

- 3000 RPM
- 256K Cache
- Approx. 40ms

INTERNAL $719

EXTERNAL WITH CARTRIDGE $889

Multifunction Magento-Optical Disk Drive for 1-Gbyte and 650-Mbyte Rewritable and WORM Disk Cartridges, With up to 4-Mbytes Read/Write cache

Maxoptix™

1GB CART. glass/poly $195

- Unlimited Data Storage
- External SCSI Subsystem
- One Year Factory Warranty
- 25-Year Life Of Glass Media
- Embedded SCSI/SCSI-2
- Data Transfer of up to 13.2Mbits/Sec.
- Ultimate Back-up For NOVELL (Ready-to-boot Backup)

TAHITI IIIM - Multifunction

- 1MB Read/Wirte Cache
- 1.3GB Optical

$2099

External Optical/1MB Cache....$2299

TAHITI IIIM - Multifunction

- 4MB Read/Wirte Cache
- 1.3GB Optical

$2119

External Optical/4MB Cache....$2275

FUJITSU

NEW!

230MB REWRITABLE, REMOVABLE OPTICAL SCSI DRIVES

EXTERNAL SCSI 230MB, 3.5" REWRITABLE OPTICAL

- External Optical Drive
- Using 2512 Internal
- Includes 1 Cartridge
- Fast Seek Time
- 3600RPM
- 256K Cache
- Software for MAC (free upon request)

$997

INTERNAL 230MB, 3.5" REWRITABLE OPTICAL

- Bare Optical Drive
- 2512
- Low Profile, Only 1"
- 3600RPM
- 256K Cache
- Fast Seek Time

$827

NEW!

REMOVABLES

SyQuest

270MB SYQUEST REMOVABLE

External SCSI Drive

- External 270MB 3.5" SCSI Removable Cartridge Drive
- Unlimited Storage Capacity
- 270MB External Drive
- Cables & Software for MAC
- 13.5ms Seek Time
- Includes one cartridge

$559

Internal Bare Drive $387

200MB SYQUEST REMOVABLE

External 200MB Drive

NEW!

- 200MB Cartridge
- Cables
- Installation Software (for MAC)
- PC Software Included With Controller Purchase

$669

Internal Bare Drive $469

44MB SYQUEST REMOVABLE

External 44MB Drive

- 44MB Cartridge
- Cables
- Installation Software (for MAC)
- PC Software Included With Controller Purchase

$379

Internal Bare Drive $239

88MB C SYQUEST REMOVABLE

External 88MB C Drive

- 88MB Cartridge
- Cables
- Reads & Write Both 44 & 88 MB
- Installation Software (for MAC)
- PC Software Included With Controller Purchase

$459

Internal Bare Drive $279

105MB 3.5" SYQUEST REMOVABLE

External SCSI 105MB Drive

- 14ms Seek Time
- 105MB Cartridge
- Cables
- Installation Software (for MAC)
- PC Software Included With Controller Purchase

$429

Internal SCSI Bare Drive $279

Internal IDE Bare Drive $239

CAPACITY	SINGLE	5-PACK
44MB Cartridge (5.25")	$59	$295
88MB Cartridge (5.25")	$89	$439
105MB Cartridge (3.5")	$57	$279
200MB Cartridge (5.25")	$97	$460
270MB Cartridge (3.5")	$85	$410

TEAC

1.44MB 3.5" With bracket add $6	$37
1.2MB 5.25"	$47
1.2/1.44MB Dual Drive	$99

FLOPTICALS

IOMEGA®

21MB Floptical Drive

floptical®

MAC Version

INCLUDES:

- External 3.5" 21MB Floptical
- One Floptical Media
- Cables , Software for MAC

$399

21MB MEDIA BY IOMEGA LASER ETCHED

SINGLE ......$19.99 5-PACK......$89.99

PC Version

INCLUDES:

IOMEGA 21MB 3.5" Floptical
One Floptical Media
Host adapter SCSI 8-bit
Cables , Software for PC

INTERNAL $369

EXTERNAL $429

21MB MEDIA BY IOMEGA LASER ETCHED

SINGLE ......$19.99 5-PACK......$89.99

BERNOULLI

150MB EXTERNAL PC TRANSPORTABLE

- Cables
- One 150MB Cartridge

$539

90MB BERNOULLI REMOVABLE
PC VERSION $339
MAC Transportable $339

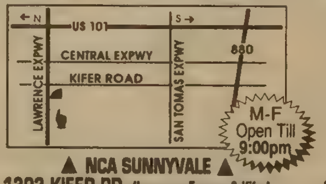
BERNOULLI CARTRIDGES	SINGLE	3-PACK
65MB	$59	$169
90MB	$109	$309
105MB	$99	$269
150MB	$109	$309

NCA Computer Products™

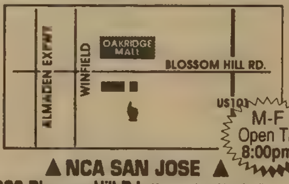
Your Computer Upgrade SUPERMARKET™

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

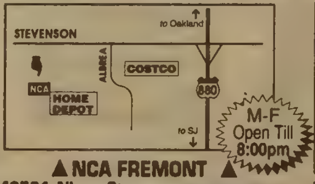
Sale Ends 9/18/94



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publicaton in a non-classified ad.

©1994 INVERSE CORPORATION

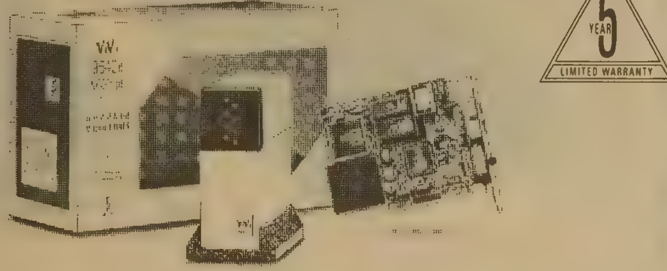
FAX/MODEMS

COMPUTER PERIPHERALS, INC.™

14,400 bps V.32/V.42 bis Modem
with **14,400 bps SEND/REC. FAX**

with DOS and WINDOWS Ver. Communication Software

ViVa
14.4/Fax



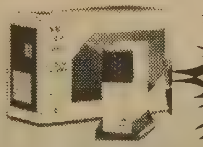
5 YEAR LIMITED WARRANTY

- 100% Hayes Enhanced AT Command Set Compatible
- V.32bis (57,600 bps Maximum throughput speed
- V.42bis and MNP 5 data compression/MNP 2-4 error Correction
- Auto-baud negotiation • Auto COM Port detection
- WYSIWYF (what you see is what you fax)
- Near laser printer quality output with PCL4 support

INTERNAL **$95**

EXTERNAL **$119**

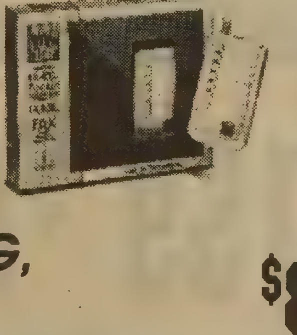
VIVA 14.4-MAC
With *FAXsft* Software



$169

ViVa 14.4 Pocket FAX-MODEM

14.4 bps pocket size modem with 14,400 bps SEND/REC.
Fax
Includes: WINFAX
& Communication Software



$238

VOICE MESSAGING, FAX, MODEM **$89**

intel®

FAX/MODEM Group III FAX
V.32bis 14,400 bps data Includes WinFax Software.
5-Yr. Warranty

14.4 Internal Fax/Modem...$109
14.4 External Fax/Modem.......$139

SatisFAXtion 400™ 14.4 Fax/Modem • MNP5/V.42/V.32
Internal...$259 **External 400e.$289**

PCMCIA 14.4 Fax/Modem........$199

Hayes® **Optima 28.8 V.42 Fast**

The Fastest Hayes™ Modem For Business Communications.

- ▶ 28,800bit/s Data & 14,400bit/s Group 3
- ▶ Includes 14,400bit/s (V.32bis) & 9600 bit/s (V.32)
- ▶ Error control V.42 & data compression V.42bis
- ▶ Includes FREE Smartcom for Windows LE & Fax software

$389

Accura 2.88 V.42
Fast Ext. Fax/Modem **$189**

USRobotics®
The Intelligent Choice in Data Communications

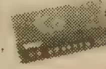
HIGH SPEED FAX/MODEMS

SPORTSTER 14,400 V.32/V.42
WITH QUICKLINK LITE SOFTWARE

14.4 INTERNAL for PC $99 **14.4 EXTERNAL for PC $129**

14.4 PCMCIA Fax/Modem World Port $289

mac&fax SPORTSTER



$139

28.8 SPORTSTER Fax/Modem....Int. $249 Ext. $269

Megahertz™ *Linking Your Worlds* **14,400 PCMCIA FAX MODEM**

INCLUDES XJACK

- •14.4bps. V.42/V.42bis
- •Auto Installation
- •Hot Insertion
- •Cellular Compatiblity
- •Includes XJACK,a retractable RJ11 connector that pops out to hook into a standard phone cord
- •Fax Software Included

NEW!

$199

GSI Model 32 16-Bit Dual 16550 UART Multi-Port IDE Card

- •16-Bit ISA compliant with new enhanced IDE & fast ATA standards
- •Supports up to two IDE drives
- •Supports new high-capcity IDE hard drives
- •High speed 1MB/sec. floppy interface(up to 4 floppy drives)
- •Dual 16550 UART serial ports & one bi-directional parallel port

IDE

$99

WONDER 16550 IDE CARD
2 IDE DRIVES/2 FLOPPY
2 HIGH SPEED 16550 SERIAL PORTS
1 PARALLEL PORT / 1 GAME
WHAT EVERY EXTERNAL 14.4 MODEM NEEDS

$69

QUICKPATH

PORT-FOLIO16 550
2 IDE HD, 2 Parallel, 4 Serial, 4 Floppy, 1 Game
13-Port Super I/O Card,
4 INTEGRATED NS16550 HIGH SPEED UARTs

$129

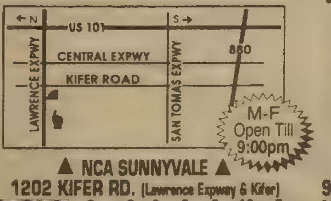
28 J

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610

STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA
CORPORATE
Corporate, Dealer, Government,
Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

FAX/MODEMS

MORE

Supra Corporation

SupraFAXModem

14,400 bps Fax, 14,400 bps Data/V.42bis / MNP5
57,600 bps throughput/ Class 1 Fax, Caller ID

UNLOCK THE WORLD OF DESKTOP COMMUNICATIONS ™

14.4i Internal *EXPRESS*

14.4 Fax/Modem for PC

Software Included:
COMit™ (DOS & Windows)
WinFax Lite™ (Windows), FaxTalk® (DOS)

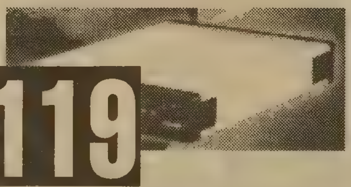
$78

14.4i External

14.4 Fax/Modem for PC

Software Included:
COMit™ (DOS & Windows)
WinFax Lite™ (Windows), FaxTalk® (DOS)
Cables & Manuals

$119

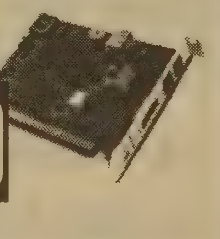


28.8i Internal

28.8 Data 14.4 Fax for PC

Software Included:
COMit™ (DOS & Windows)
WinFax Lite™ (Windows), FaxTalk® (DOS)
Cables & Manuals

$189



External 28.8 for PC $239

14.4i Ext. MAC

14.4 Fax/Modem for MAC

- Software Included:
  Microphone LT, FAXstf™
  CompuServe Information Manager™
- ARA™ Scripts
- Cables and Manual.

$129

28.8i Ext. MAC

The Fastest Modem for the MAC
28.8 Data/14.4FaxModem for MAC

- Software Included:
  Microphone LT, FAXcilitate™
  CompuServe Information Manager™
- Cables and Manual.

$249

14.4PB Int. MAC

14.4 Fax/Modem for PowerBooks

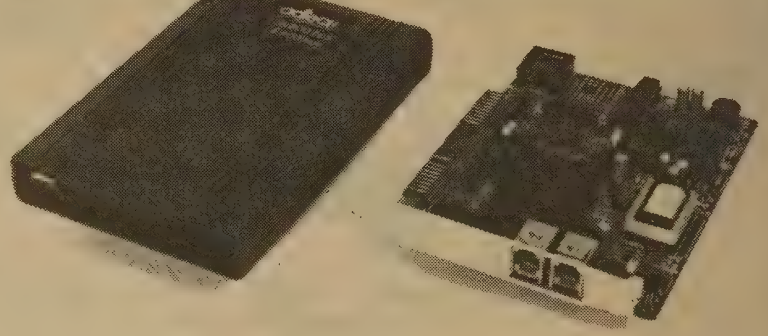
- 14,400bps FAX/DATA
- V.42bis/MNP 5 • 57,600 bps Max Throuput
- Caller ID, SilentAnswer™
- Works in PowerBook Models 100-180
- Software Includes:
  °Microphone™ LT
  °FAXstf™, °Compuserve
  °Information Manger™, °ARA Scripts • Manuals

$199

28.8i PB internal for PowerBooks $299

adtech
micro systems, inc.

innovation in communication



Smart Connect 14.4
14,400bps Fax/Modem
with Software

Internal	Macintosh	External
$79	$119	$99

Smart Connect 28.8
28,800bps Modem 14,400 Fax
with Software

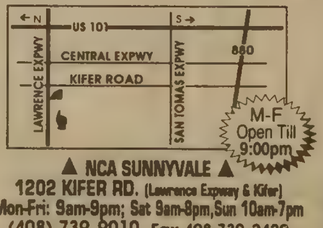
Internal	Macintosh	External
$159	$199	$179

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

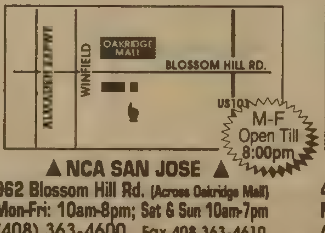
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

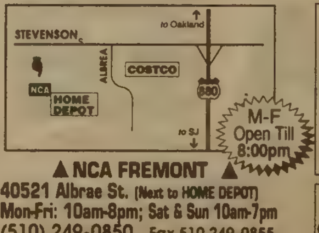
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA
CORPORATE
Corporate, Dealer, Government,
Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

OWEST PRICE GUARANTEED* OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

QUALITY BRAND NAME PRO

PRACTICAL PERIPHERALS®

14,400bps External Fax Modem

PM144MT II
- 14,400 bps data and 14,400 bps send/receive fax modem
- 115,200 bps DTE plus V.42bis data compression
- Async only
- Quick Link II Software

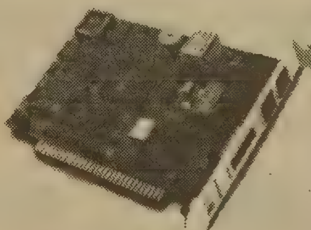
$149

14,400bps Pro Class Internal Fax Modem

PC144HC
- 14,400 bps data and 14,400 bps send/receive fax modem
- Leased-line operation
- 16550 Buffered UART
- "BONG" detection
- 115,200 bps DTE plus V.42bis data compression
- Select IRQ 2-5
- Async and Autosync
- Quick Link II & WinFax Lite Software

$169

28,800bps Pro Class Internal Fax Modem



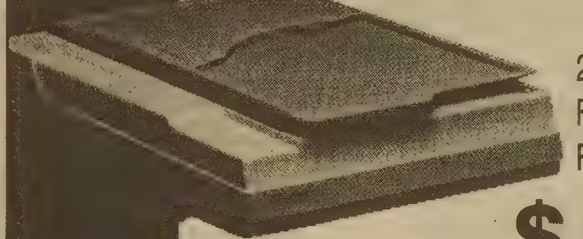
PC288MT V.FC
- 28,800 bps data and 14,400 bps send/receive fax modem
- Fast V.FC
- Upgradeable to V.34
- Leased-line operation
- 16550 Buffered UART
- "BONG" detection
- 115,200 bps DTE plus V.42bis data compression
- Async,Sync and Autosync
- Quick Link II & WinFax Lite Software

$299

RELISYS

High-Quality Scanning!
Scanning with Spectacular Color, Crisp Resolution, PinPoint Accuracy, and an Affordable Price

AVÉC *Colour* 2400



2400DPI
FLATBED COLOR SCANNER
FOR PC or MAC

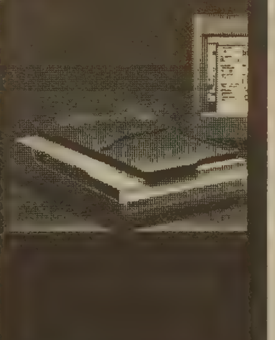
$529

ColdScan?

ColdScan is a revolutionary new concept in scanning technology that allows the [illegible] and Relisys' optical system to be completely enclosed.

The result...

- Dust-Free & particles sealed out... for crisp razor-sharp scans.
- No warm-up time... start scanning the moment you turn your system on.
- Silent Operation... no noise from cooling fans
- Reliable long-lasting operation... up to 35,000 hours of scanning usage.



AVÉC Colour 2400

- **Flatbed desktop, 3-Pass scanner**
- **High Resolution up to 2400 dpi (Interpolation)**
- **600X300dpi (Optical)**
- **16.8 Million Colors & 256 grayscale levels**
- **New Cold-scan technology**
- **Maximum Scanning area 8.5" X 14"**
- **Lamp life expectancy up to 35,000 hours**
- **SCSI-2 Interface for Windows and Macintosh environments**
- **Twain compatible**
- **Optional 50-page Auto Document Feeder (RELI ADF30)**
- **One-year Warranty and HOT-LINE Technical Support.**

Software Included with the Relisys Scanner:

Flatbed Color Scanner for PC
- Caere's OmniScan™
- TWAIN Driver
- SCSI Cable & Terminator
- Standard Power Cord

Flatbed Color Scanner for Mac
- Adobe Photoshop™ LE
- Art-Scan professional scanning software
- SCSI cable & terminator
- Standard Power cord

Optional Document Feeder....$399

The Reli 4816(T) One Pass Color Scanner

- **One Pass Scanner**
- **High Resolution up to 4800 dpi by interpolation (True 1600 X 400)**
- **16.8 Million Colors & 256 grayscale levels**
- **Cold-scan technology**
- **Maximum Scanning area 8.5" X 14"**
- **Lamp life expectancy up to 35,000 hours**
- **SCSI-2 Interface for Windows and Macintosh enviroments**
- **Twain compatable**
- **Optional 50-page Auto Document Feeder**
- **One-year Warranty and HOT-LINE Technical Support.**

$999

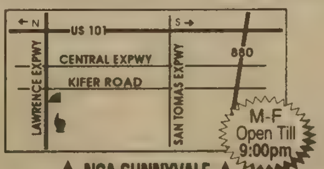
NCA™ Computer Products

Your Computer Upgrade SUPERMARKET™

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expwy & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610

STEVENSON
to Oakland
ALBREA
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA *CORPORATE*
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

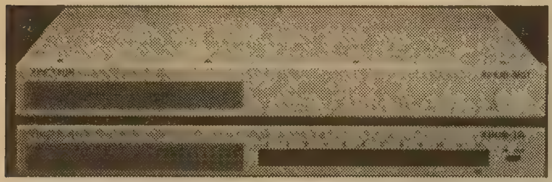
* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

NETWORK PRODUC

XINETRON

ETHERNET CONCENTRATORS



8 PORT 10BASE-T CONCENTRATOR

Simply the lowest priced 8 port concentrator for twisted pair (10Base-T) wiring. Each port has a diagnostic LED which indicates link integrity and data send/receive. A bnc port lets you cascade hubs, or connect to your existing thin wire network.

XI-4T8

$179

12 PORT SNMP CONCENTRATOR

Intelligence for even the simplist network. The XI-4T12 gives you 12 10Bast-T ports, 1 AUI or BNC port with an exhaustive list of indicators on the front panel which can detect network errors, station lock-ups & traffic jams. Port 12 has an IN/OUT switch for daisy-chainning hubs via twisted-pair wiring without you having to build crossovers cables.

XI-4T12

$579

ETHERNET CARDS

VESA LOCAL BUS ETHERNET COMBO CARD

Both hardware & software configurable, 32-bit high speed data transfers, 3 connectors: 10Base-T, AUI & BNC for any cable type. Supports Novell ODI, LAN Manager, Lantastic, TCP/IP, Windows for workgroups, Banyan Vines & 3Com 3+ Open.

$119

NE-2000 COMPATIBLE 10BASE-T CARD

The Xi-321TA emulates the NE-2000 as a 16-bit ISA Ethernet card. Configure the card via software. Twisted-pair ready. Comes with FREE Novell Boot ROM, diagnostic disk & drivers for Novell, LAN Manager, NDIS, TCP/IP, & Windows for workgroups.

$49

HARDWARE CONFIGURABLE COMBO CARD

Our advanced design in a 16-bit ISA card lets you choose between thick, thin, or 10Base-T cable. Jumper configurable. Fully Novell NE-2000 compatible & certified.

$59

PCI ETHERNET COMBO CARD

High-Speed Bus Mastering connects your Pentium or 486 System using the PCI Bus. Supports port to provide access to either a coaxial or twisted-pair Ethernet.

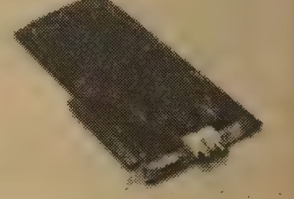
$179

intel

•Ethernet Express Products	Single	5-Pack	20-Pack
16-bit, 10 Base T and Coax Combo	$109	459	2395
16-bit, Coax Cards or 10 Base T Cards	$109	439	1799
•Ethernet Express Flash Cards	**Single**	**5-Pack**	**20-Pack**
16-bit, 10 Base T and Coax Combo	$134	624	2399
16-bit, 10 Base T or Coax Cards	$119	539	1899
32-bit 10 Base T of Coax Cards	$229		
•Print Servers/NetPort Line			
NetPort for 10 Base T or Coax	$398		

SMC

•Elite Ultra Line/Ethernet (Full Retail Version)	Single	6-Pack	24-Pack
16-bit, Coax or Board Twisted Pair	$109	459	2199
16-bit, Combo Board	$119	545	2549
32-bit EISA Combo	$219		
•3812 Line of Stackable Hubs			
12 Port Hub	$599		
Network Managment Module	$415		
•Twisted Pair Hubs			
Elite 10 Base T w/12 RJ-45	$599		
Elite 10 Base T w/12 RJ-45 with SNMP	$899		
Elite 10 Base T w/8 RJ-45	$339		



3Com

3COM

EtherLink II - 3C503 16-bit 10 Base T / Coax	$167/167
EtherLink III - 3C509 10 Base T or Coax	$529 5 Pack/119 Single
EtherLink III - 3C509 Combo Card 16-bit	$519 5 Pack/129 Single
EtherLink III - 32-bit EISA 10 Base T or Coax	$229
PCMCIA - 3C589 10 Base T/Combo	$189/239
LinkBuilder - 3C16270 - 12 port Hub	$339

NOVELL.

NOVELL	single	5-Pack
NE2000 plus 16-bit Coax	$109	499
NE2000 plus 16-bit Twisted Pair	$103	473
NE2000 plus Combo	$133	549
NE3210 32-bit EISA Combo	$213	

NOVELL SOFTWARE

Ver.	5 user	10 user	25 user	50 user	100 user	250 user
3.12	$599	$1299	$1899	$2499	$3649	$6499
4.01	$819	$1793	$2599	$3594	$5395	$9694

SPECIAL OFFER

16-bit Card with Novell Lite 1.1	$99
Leadman 10 Base T or Coax 8-bit/16-bit	$59

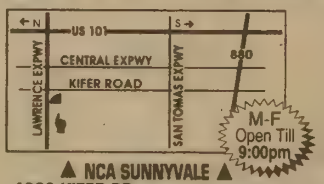
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

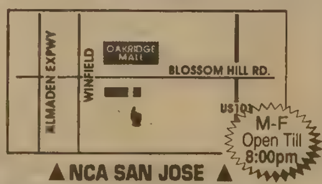
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

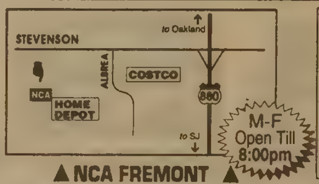
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

BOARDS, RAM,

MORE

MEMORY SIMMS

intel. CPUs intel inside pentium

- 486DX-33MHz
- 486DX2-66MHz
- 486DX4-100MHz
- Pentium 60MHz
- Pentium 66MHz
- Pentium 90MHz

LOWEST PRICE GUARANTEED*

IBM COMPATIBLE

256X9	80ns	3Chip	$Call
1MBX9	80ns	3Chip	$Call
1MBX9	80ns	9Chip	$Call
1MBX9	70ns	3Chip	$Call
1MBX9	70ns	9Chip	$Call
1MBX9	60ns	3Chip	$Call
1MBX9	60ns	9Chip	$Call
4MBX9	80ns	9Chip	$Call
4MBX9	70ns	9Chip	$Call
4MBX9	60ns	9Chip	$Call
16MBX9	70ns	9Chip	$Call

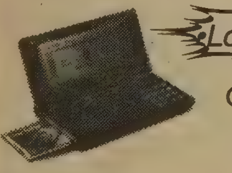
72-PIN SIMMS

2MB 604-70ns/60ns	$CALL
4MB 1X36-70ns/60ns	$CALL
8MB 2X36-70ns/60ns	$CALL
16MB 4X36 70ns/60ns	$CALL
32MB 8X36 70ns/60ns	$CALL

PCMCIA

FlashCard

PCMCIA Mass Storage For Mobile Computers



Lower Prices

Seagate

SunDisk
The Solid Advantage

☐ HP 95LX
☐ GRiD Convertible 386/486

Kit Includes:
FlashCard, Communication Cable, Software Drivers

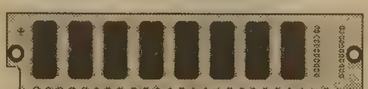
2.6MB FlashCard Kit	$399
5.2MB FlashCard Kit	$499
10.4MB FlashCard Kit	$649

☐ HP 100LX/OmniBook
☐ EO Personal Com. 440/880
☐ NCR 3170 Safari*

FlashCard Only, No Software Needed
* Kit Includes FlashCard & Software

2.6MB FlashCard	$289
5.2MB FlashCard	$349
10.4MB FlashCard	$549
20MB FlashCard	$999

Macintosh



1MBX8	80ns	2Chip	$Call
1MBX8	80ns	8Chip	$Call
1MBX8	70ns	2Chip	$Call
1MBX8	70ns	8Chip	$Call
2MBX8	80ns	2Chip	$Call
4MBX8	80ns	8Chip	$Call
4MBX8	70ns	8Chip	$Call
4MBX8	60ns	8Chip	$Call
4MBX8	80ns	II-FX	$Call
16MBX8	70ns	8Chip	$Call

32-BIT FOR QUADRA 800, CENTRIS, LCIII & POWER PC's

2MB Module	$Call
4MB Module	$Call
8MB Module	$Call
16MB Module	$Call

MAC MEMORY INSTALLATION

Installation $15
(excluding Powerbooks)

POWERBOOK MEMORY

6MB Module (160/180)	$CALL
8MB Module (160/180)	$CALL
10MB Module (160/180)	$CALL
6MB Modules (140/145/170)	$CALL

LASER PRINTER MEMORY

HP laser Jet 4 & 4M HEWLETT PACKARD

4MB	$Call
8MB	$Call

HP Laser Jet IIP, III, IIID HP IIIsi
OTHER LASER PRINTERS
PANASONIC P4410/4430 Printers
Compaq Page MRQ Printers EPSON Action II
Printers OKI 400 Printers & NEC Printers

CACHE MEMORY

32X8-20 ..... $5.29

HEWLETT PACKARD

Laser Printers,
DeskJets Pritners
PRINTER ACCESSORIES:
TONER CARTRIDGES
TRAYS / FEEDERS
MEMORY MODULES

MOTHERBOARDS

American Megatrends

THE MOST RELIABLE BOARDS IN THE INDUSTRY

Excalibur Pentium PCI & VLB

VLB Pentium 60MHz 512K	$1399
PCI ISA Pentium 60MHz 256K	$1399
PCI EISA Pentium 60MHz 256K	$1499

Super Voyager VLB-II

- ▶ 2 VESA Local Bus Slots - 7 ISA Slots
- ▶ ZIF CPU Expansion
- ▶ On Board I/O
- ▶ Up to 64MB on Board RAM
- ▶ 256K Cache

486DX33 VESA 256K	$579
486DX50 VESA 256K	$739
486DX/2-66 VESA 256K	$799
486DX/2-33/66 PCI 256K	$999

Enterprise III

- ▶ 8 EISA Bus Slots - ZIF Expansion Sockets
- ▶ Buffered VESA Loca Bus
- ▶ 256MB DRAM Support/256K Cache

486DX33MHz	$869
486DX50MHz	$1049
486DX2/66MHz	$1089

Enterprise IV

- ▶ Seven EISA Bus Slots
- ▶ Two VESA Local Bus
- ▶ ZIF Expansion Sockets
- ▶ On Board I/O

486DX33MHz	$749
486DX50MHz	$929
486DX2/66MHz	$899

NICE™

486DX EISA/VESA/ISA...$229

ZIF SOCKET FOR UPGRADABILITY
0Mb RAM UP TO 128Mb ,256K Cacheup to 1Mb

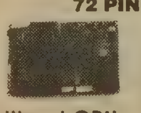
Genoa SYSTEMS CORPORATION

Turbo Express 486VLB $139
256K Cache, ZIF Socket 8Slots
PCI 486/256K Cache $209

NCA's TERMINATOR 4G

486DX-3VESA SLOTS

- •128K Cache exp. to 256K •0MB upgradable to 32MB
- •**DEEP GREEN PC**
- •**USES 32 PIN OR 72 PIN SIMMS**



without CPU $89

MYLEX *Ultra Reliable, High Performance MotherBoards*

MGI-486: 486VLB

2-VLB Slots, 256K Cache (up to 512K)
0MB up to 64MB RAM uses 30pin and 72pin SIMMS
Green PC, ZIF Socket, SIS Chipset

$159

MGV-486: 486PCI&VLB

Supports DX,DX2,DX4. 3PCI slots, 2VESA Slots
256K Cache, 0MB up to 128MB RAM uses 72pin Simms, Green PC, ZIF Socket, ALI Chipset

$199

MGE-PNTM: Pentium 60/66Mhz EISA/PCI

7 EISA/3 PCI slots, 256K Cache upto 512KB,
0MB up to 192MB RAM uses 72pin Simms
ZIF Socket, Intel Chipset, Full Size Board
Fast SCSI-II PCI, Serial/Parallal, IDE, FD Controller Built in

$699

NCA's Premier/PCI'
PCI Pentium Motherboard

- •Itegrated SMC37C665 Super I/O Chip . Providing: Two FIFO Hi Speed Serial Ports/1 parl.
- •Three PCI Local Bus PCI-Providing a high Bandwidth Data Path
- •Five ISA Slots (Includes 1 Shared ISA/PCI Slots)
- •Intel Mercury PCI Chip Set
- •256K Direct Mapping, write back second level Cache
- •Integrated PCI IDE port

no CPU **$399**

Pentium 60MHz (no CPU) 256K CACHE VLB Motherboard .. $289

NCA's PCI/i-486
PCI 486 Motherboard

- • Three 32bit PCI Slots
- • Four 16bit ISA Slots
- • Intel PCI 486 Saturn Chipset
- • 256K Cache (up to 512K)
- • **Integrated NCR 53C810 32 bit PCI SCSI Controller**
- • Memory Upto 128MB
- • ZIF Socket for future upgrade
- • Integrated Hi-Speed Serial Ports/1Parl.

$269 NO CPU

NCA's High Quality Pentium PCI
90MHz Pentium PCI-90 Super Motherboard

- •256K Cache
- •Uses 72-Pin SIMMS
- •High Speed 16550 Serial Port
- •PCI & ISA IDE Builtpin
- •3-PCI Slots
- •Built-in Floppy Support
- •Intel Chip Set & Board
- •Made in Ireland
- •CPU Cooling Fan...$29

Incredible deal!

$389

CPU Sold seperately

alaris Manufactured By IBM
3 Year Warranty

- ▶ VESA Local Bus **128K Cache**
- ▶ **Includes CPU & Co-Processors**
- ▶ 16K Internal Cache

486SLC2-66, 26.2mips .. $279

LEOPARD Plus
486SLC-66 .... $289

IBM

Cobalt 486/75MHz Triple Clocked Motherboard

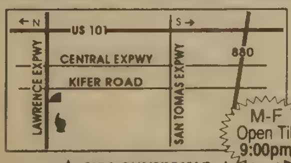
IBM 486/7MHz CPU with 16Kb Int. Cache, up to 64 (using 72Pin Simms), 2VESA Slots, Co-Processor **$479**

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

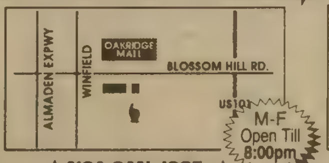
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

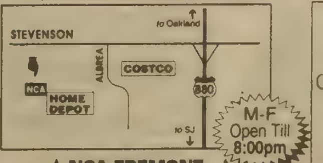
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

POINTING DEVICES

MORE

MICROSPEED

Get $10 back with a manufacturer's End-user Mail-in Rebate. Offer Expires Sep. 1st 1994

- 100% Microsoft mouse compatible
- Includes PrecisionPointer™ driver software that automatically adjusts resolution from 50 to 1000 dpi for quick movement and precise control.

PC-TRAC

TRACKBALL

Serial Version $\$58^{99}$

Bus Version $\$99^{99}$

PS/2 Mouse Port Comp. $\$79^{99}$

MicroTRAC

TRACKBALL

Serial/PS/2 Version $\$57^{99}$

Macintosh Version $\$65^{99}$

MacTRAC 2.0

TRACKBALL

ALL MACS $\$69^{99}$

WinTRAC

TRACKBALL

Serial Programmable for WIN $\$79^{99}$

MICROSPEED MOUSE DELUXE

Serial version with mousepad & Software

$\$29^{99}$

MICROSPEED REPLACEMENT MOUSE $\$19^{99}$

3-Button Serial Mouse (250dpi)

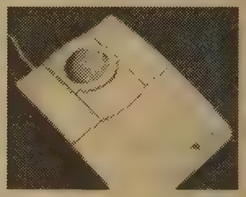
MOUSE SYSTEMS

MOUSE!

- 2-Button Serial
- High Resolution 350dpi
- Ergonomic Design
- Buttons re-assignable for left or right handed
- Ultra-Res ballistic acceleration
- Includes mouse pad
- Designer pop-up menus

$\$17^{99}$

PC TRACKBALL II



- 3-Button Trackball
- High Resolution 680dpr
- Ergonomic Design
- Buttons re-assignable for left or right handed
- Ultra-Res ballistic acceleration

$\$39^{99}$

PAGEBRUSH/TrueColor

NEW!

- Scans at up to 800dpi in 16.7 million colors
- TWAIN compliant
- Photo CD format supported
- Real-time brightness control
- Supports TIFF, TGA, BMP, EPS, PCX ,GIF & JPEG
- Stitching allows you to scan large images
- Includes SmartPage OCR & PhotoFinish software

$\$199^{99}$

PAGEBRUSH/256

- Scans at 100-400 dpi
- Real-Time image brightness control
- Separate Gamma, Brightness, Hue, & Saturation controls
- Special effects: Averaging, Blur, sharpen, Mosaic & More...
- Supports TIFF, TGA, BMP, EPS, PCX & GIF
- Stitching allows you to scan large images
- Includes GO-CR software

$\$89^{99}$

COBRA JOYSTICK

- Auto centering
- X & Y trim adjustments
- 8 Directional control
- Ultra-sensative buttons

$\$9^{99}$

ALTES 2-button afforable mouse.. $\$9^{99}$

MACPOINT one-button 350dpi MAC mouse with pad......... $\$29^{99}$

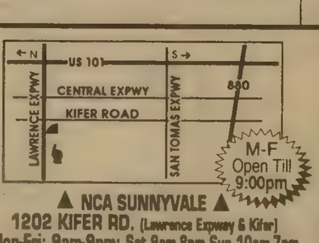
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

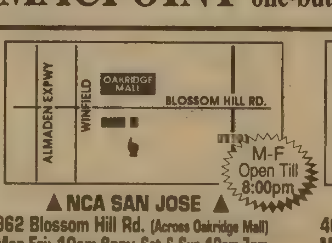
DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

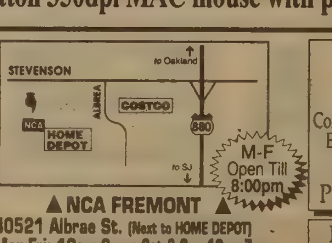
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm,Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

BRAND NAMES

LOGITECH

Introducing
MovieMan
VIDEO AND AUDIO CAPTURE BOARD

The Easy, Affordable Way To Add Sound & Video To Your PC

- Integrated video & audio capture on the same board
- Capture video at 30fps & audio up to 44KHz, stereo
- SCSI CD interface, MIDI emulation
- Supports video for Windows
- Easy installation, No jumpers to set
- Uses 1 address line, No IRQ or DMA

BUNDLED SOFTWARE INCLUDES:
Adobe Premiere
Logitech EasyClip
FotoTouch Color

$249

SCANMAN Easy Touch
256 Gray Scale Personal Scanner

- Resolution from 100-400dpi
- TIF, JPEG, PCX, BMP, EPS
- TWAIN compliant
- Includes FotoTouch, OmniPage Direct AnyFont OCR software
- Easy installation, No jumpers to set
- No IRQ or DMA's to worry about

BUNDLED SOFTWARE INCLUDES:
Adobe Premiere
Logitech EasyClip
FotoTouch Color

$209

FIRST MOUSE & TRACKBALL
Your Choice For Value And Quality

FIRST MOUSE:
- 400dpi resolution
- MouseWare Lite software

FIRST TRACKBALL:
- 270dpi resolution
- MouseWare Lite software

FIRST MOUSE	FIRST TRACKBALL
$26.99	$42.99

SCANMAN Power Page
Complete, Integrated scanning, copying, faxing solution for business

- Special fax and copy features give you crisp, clear results.
- Professional Gray Scale Output Quality
- TWAIN compliant
- OLE compatible
- And Much More...

$469

TRACKMAN Voyager
Unique Trackball That Adapts To The Way You Work

- 250dpi resolution
- Enhanced MouseWare software
- 3 Year warranty

$59.99

SOUNDMAN Wave
Advanced Technology For The Most Realistic Sound Available.

- 16-Bit Sound Card
- Yamaha OPL-4, 44 Voice FM, WaveTable Synthesis
- SCSI CD-ROM Interface
- 2MB of Wave table samples
- 128 General MIDI instruments
- 5 Channel stereo mixer
- Valuable Bonus Software included

$179

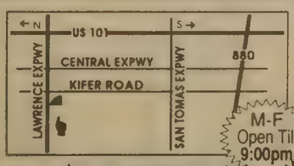
SoundMan Wave

NCA Computer Products™
Your Computer Upgrade SUPERMARKET™

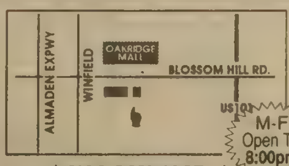
DISCOVER | AMERICAN EXPRESS | MasterCard | VISA | PURCHASE ORDERS

Sale Ends 9/18/94

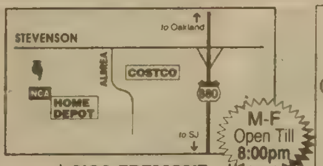
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE OR ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

* "LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

©1994 INVERSE CORPORATION

ACCESSORIES

MORE

CASES

EXTERNAL SCSI DRIVE CASES

- ▶ High Quality Metal Cases
- ▶ 2 Centronics Output
- ▶ Noise-Free Fan
- ▶ External SCSI ID Switch
- ▶ External SCSI Cable (50C-50C or 50C-25C)
- ▶ Power Cable & Hardware

For 3.5" or 5.25" Half Height	**$99**
For Full Height or 2 HH (NCA)	**$199**
For 2 Full Height 200W with 5-fans	**$279**
For 4 Full Height With Panel	**$499**

SCSIVue™ NEW! by GRANITE D•I•G•I•T•A•L
Active Diagnostic Terminator
- Improves SCSI Performance
- Analyzes Signal Quality
- Termination Power Indicator
- Diagnoses Problems

$49

POWER SUPPLIES

250Watt UL approved AT	$49
250Watt UL for Tower	$49
400Watt UL for Tower	$179

American Power Conversion

UNINTERRUPTED POWER SUPPLIES

DESCRIPTION	PRICE
BK250VA	$109
BK400VA	$169
BK450VA	$199
BK600VA	$279
BK900VA	$399
BK1250VA	$519

TRIPP LITE EST 1922 "THE POWER PEOPLE" MADE IN THE USA

DESCRIPTION	PRICE
250VA (BC-250) UNINTERRUPTED POWER SUPPLY	$99
STRIKER FILTERED SPIKE STRIKER, 6-OUTLET SURGE SUPPRESSOR	$8.99
SPIKE STIK AC SPIKE & LINE SUPPRESSOR	$12.99
SPIKE BAR SUPER 7 7-OUTLET AC SURGE W/NOISE FILTER & DIAGONTIC CIRUITRY	$15.99
SPIKE BAR (SK 6-6) 6-OUTLET PREMIUM SURGE SUPPRESSOR	$22.99
TERMINATOR TR6 SURGE SUPPRESSOR 13,000 amp protection	$28.99
ISOBAR4 ULTRA PREMIUM SURGE SUPPRESSOR W/ CIRCUIT DIAGNOTICS	$43.99
ISOBAR6 6-OUTLET PREMIUM SURGE SUPPRESSOR	$47.99
POWER MISER AUTOMATIC MONITOR SHUTDOWN TIMER & SURGE SUPPRESSOR	$49.99

6-OUTLET BASIC POWER STRIP PLASTIC **$4.99**

COMPUTER CASES

- ▶ HIGH QUALITY CASES
- ▶ UL APPROVED POWER SUPPLY
- ▶ GREAT STYLE SELECTION

DESCRIPTION		PRICE
EC-270	Desktop 200W	$79
EC-477	Med Tower 200W	$99
EC-672	Full Tower 250W	$119
EC-383 IDU	Mini Tower 200W	$79
EC-487IDU	Med Tower 200W	$109
EC-682 IDU	Full Tower 250W	$139
CTC-26DU	MiniTower 230W	$59
CTC-27DU	MedTower 230W	$89
CTC-28DU	Full Tower 250W	$109
CTC-49DU	SuperTower 300W	$159

NCA's 9-BAY TOWER CASE 250W UL... $109
• 6 EXPOSED BAYS • 3 HIDDEN BAYS

CABLES

HARD DRIVE EXTERNAL CABLES

DESCRIPTION	PRICE
CENTRONICS TO SCSI-II	$39.99
CENTRONICS TO MAC 25-PIN	$7.99
CENTRONICS 50 TO CENTRONICS 50, 6FT	$12.99
CENTRONICS 50 TO CENTRONICS 50, 3FT	$9.99
CENTRONICS TO DB-50	$39.99
DB-50 TO SCSI-II	$39.99
DB-50 TO DB-50	$39.99
SCSI-II TO SCSI-II	$39.99
FAST WIDE SCSI-II TO CENTRONICS	$89.99

HARD DRIVE INTERNAL CABLES

DESCRIPTION	PRICE
SCSI 50-PIN RIBBON 3 CONNECTOR 2 devices	$5.99
SCSI 50-PIN RIBBON 4 CONNECTOR 3 devices	$9.99
SCSI 50-PIN RIBBON 5 CONNECTOR 4 devices	$12.99
SCSI 50-PIN RIBBON 8 CONNECTOR 7 devices	$22.99
IDE 40-PIN RIBBON 3 CONNECTORS	$3.99
FLOPPY & IDE CABLE SET	$5.99

POINTING DEVICES

LOGITECH

SEE PAGE 33

Microsoft

NAME	PRICE
Microsoft Mouse II OEM Serial version	$49
Microsoft Mouse II OEM Bus version	$69

MICROSPEED

NAME	PRICE
PC-TRAC serial/bus/PS/2	$58.99/99.99/79.99
MacTRAC 2.0 SE & Mac II	$69.99
WinTRAC serial for Windows	$79.99
MicroTRAC serial, PS/2/MAC	$57.99/65.99

MOUSE SYSTEMS

SEE PAGE 32

PoinTex

NAME	PRICE
MAC 2-BUTTON MOUSE ADB PORT	$24.99
MAC ACTION MOUSE WITH SOFTWARE & MOUSEPAD	$59.99

QuickShot by Bondwell

WARRIOR 5 PLUS	**$9.99**
RAIDER 5 JOYSTICK	**$15.99**
Sound Beat QS-820 Speakers	**$12.99**
WARRIOR 5 Deluxe Analog Joystick for PC	$9.99
Smart Game Card 2-Game ports Selectable Speed	$16.99
Star Fighter 5 Control Center	$9.99
Sound Mate II Amplified Speakers	$19.99

MEDIA

DESCRIPTION	SINGLE	5-PACK
2120 (120/250MB)		
SONY QD2120 120/250MB	14.99	65.00
SONY QD2120 120/250MB Q80	17.99	80.00
3M 2120F FORMATTED XMAT	18.00	89.00
MAXELL DC2120 UNFORMATTED	16.99	79.00
MAXELL DC2120 FORMATTED Q80	18.99	89.99
6000(1/4" TAPES)		
SONY QD6150 150MB	$19.95	$90.00
SONY QD6250 250MB	$19.99	$90.00
SONY QD6525 525MB	$26.99	$125.00
MAXELL D6250 250MB	$19.95	$95.00
MAXELL D6525 525MB	$24.99	$117.00
3M DC6525 525MB	$29.95	$145.00
3M MAGNUS 1.6GB	$CALL	$CALL
DAT 4mm 90meters		
SONY 90M	$14.99	$65.00
MAXELL 90M	$15.95	$69.00
DAT 8mm 112meters		
EXABYTE UP TO 5.0GB TAPES	$18.00	$89.00
TDK	$9.99	$45.00
MAXELL	$11.99	$55.00
FLOPPY DISKS		
SONY 2.88M DISKS	10PACK ONLY $62.50	
BULK 1.44M 3.5" FORMATTED	.68¢	25PACK $15.99
BULK 1.2M 5.25" FORMATTED	.39¢	25PACK $9.99
REMOVABLE DISKS		
SYQUEST 44MB SQ400	$59.00	$295
SYQUEST 88MB SQ800	$89	$439
SYQUEST 105MB 3.5"	$57	$279
SYQUEST 200MB 5.25"	$97	$460
SYQUEST 270MB 3.5"	**$85**	**$410**
BERNOULLI	See pg. 26	
SONY M.O. 128MB OPTICAL	**$39**	**$185**
VERBATIM 128MB OPTICAL	**$39**	**$185**
FUJITSU DYNAMO 128MB	**$39**	**$185**
KOMAG 128MB OPTICAL	**$29**	**$139**
RICOH 128MB OPTICAL	**$45**	**$215**
MAXELL 128MB OPTICAL	**$39**	**$185**
MAXOPTIX 1.0GB GLASS OR POLY	$195	$979
RICOH 650MB	$145	$699

CleanPath™ Computer-Controlled Maintance Kit
by discwasher® **Kit Includes:** Only... $4.99
CleanView Anti-Static CRT/VDT Cleaner • CleanKey Keyboard Cleaner
PerfectPrint Printer Cleaner • DisClean Disk Drive Cleaner
Instruction Manual • Software Diskette

KEYBOARDS

DESCRIPTION	PRICE
MITSUMI BLACK	$39.99
Spill Resistant 101	$19.99
MITSUMI High Quality Keyboard	$29.99
ALPS SWITCH Click-Style	$39.99
MACINTOSH Compatible Click-Style Extended	**$69.99**

FOCUS

DESCRIPTION	PRICE
FOCUS 2000 W/COVER	$42.99
FOCUS 8000 with Calculator	$59.99
FOCUS 9000 with Calculator / programmable	$69.99

MICROSPEED

DESCRIPTION	PRICE
DELUXE 101-KEY MEMBRANE includes PS/2 adp.	$44.99
DELUXE 101-KEY TACTILE includes PS/2 adp.	$58.99

COMPUTER TOOL KIT

10PC TOOL KIT	$10.99
39PC DELUXE w/SOLDERING IRON	$42.99

CPU COOLING FAN........ $7.99

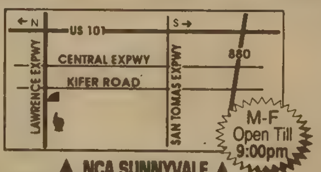
NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

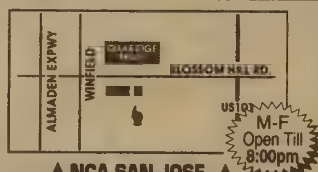
DISCOVER · AMERICAN EXPRESS · MasterCard · VISA · PURCHASE ORDERS

Sale Ends 9/18/94

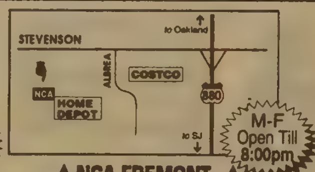
PRICE SUBJECT TO CHANGE WITHOUT NOTICE. LIMITED STOCK ON SPECIAL ITEMS. NOT RESPONSIBLE FOR TYPE ERRORS



▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420



▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610



▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad.

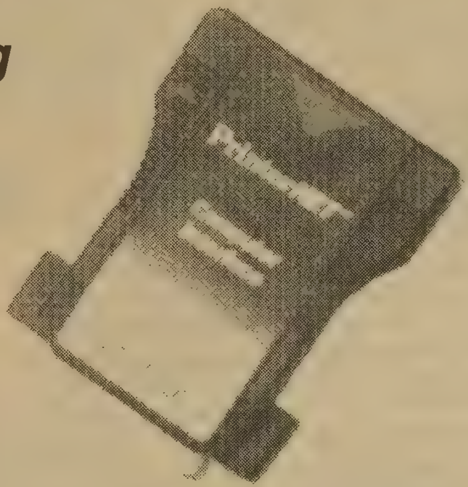
©1994 INVERSE CORPORATION

PRIMAX QUALITY PRODUCTS

Printer **NET**

Fast, Reliable and Easy Printer Sharing

- Connect 16 computers with up to 6 printers
- Transmission distances of up to 1,200 feet
- High-speed 128Kpbps interface speed.
- Optional Hand-Held Controller for
- software-free printer selection
- Power-free in most applications
- No complicated network cards to install

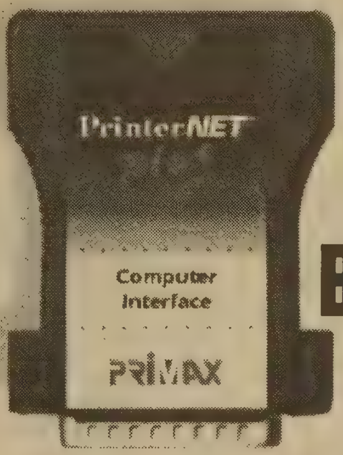

PrinterNET

$75

Printer **NET plus**

Fast, Reliable and Easy Printer Sharing

- Transmission distances of up to 1,200 feet
- Ultra-fast 625Kpbps interface speed.
- CRC error checking insures error-free data transmission.
- Totally self-contained-no network cards to install
- Printer selections via Pop-UP TSR
- Up to 32 total nodes, as many as 8 printers.
- Software features real-time printer and system status, print spooling and file transfer functionality.


PrinterNET
plus
Computer Interface
PRIMAX

CALL FOR BEST PRICING

DataPen

ACCURATELY READS MANY LANGUAGES!

- Up to 100 characters per second
- From 8 to 22 points character size
- Virtually any font is recognized
- Supports Several languages
- User definable character sets
- Uses parallel port

$275

NCA Computer Products™

Your Computer Upgrade SUPERMARKET™

DISCOVER AMERICAN EXPRESS MasterCard VISA PURCHASE ORDERS

Sale Ends 9/18/94

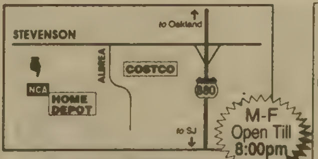
PRICE SUBJECT TO CHANGE WITHOUT NOTICE LIMITED STOCK ON SPECIAL ITEMS NOT RESPONSIBLE FOR TYPE ERRORS

← N
US 101
S →
CENTRAL EXPWY
KIFER ROAD
LAWRENCE EXPWY
SAN TOMAS EXPWY
880
M-F Open Till 9:00pm

▲ NCA SUNNYVALE ▲
1202 KIFER RD. (Lawrence Expway & Kifer)
Mon-Fri: 9am-9pm; Sat 9am-8pm, Sun 10am-7pm
(408) 739-9010 Fax 408 739-2420

ALMADEN EXPWY
WINFIELD
OAKRIDGE MALL
BLOSSOM HILL RD.
US101
M-F Open Till 8:00pm

▲ NCA SAN JOSE ▲
962 Blossom Hill Rd. (Across Oakridge Mall)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(408) 363-4600 Fax 408 363-4610


STEVENSON
to Oakland
ALBRAE
COSTCO
NCA
HOME DEPOT
880
to SJ
M-F Open Till 8:00pm

▲ NCA FREMONT ▲
40521 Albrae St. (Next to HOME DEPOT)
Mon-Fri: 10am-8pm; Sat & Sun 10am-7pm
(510) 249-0850 Fax 510 249-0855

NCA CORPORATE
Corporate, Dealer, Government, Educational, & International:
(408) 522-8672
P.O. FAX(408) 739-2420

MAIL ORDER DEPT.
Call (408) 522-3050

"LOWEST PRICE GUARANTEED" OFFER applies only to items which are in stock at an authorized local retailer and NCA on exact same item in retail packaging. Not valid for one of a kind, clearance or limited quantity offers, or on bonus or free offer items. NCA reserves the right to limit quantities on all products. Item must be advertised in a local publication in a non-classified ad

©1994 INVERSE CORPORATION

User Group Network

BULLETIN BOARDS

MULTI-ZONE

First Online. (408)257-5800; (415)598-0398; (510)797-8730. 1200–16,800. Over 30,000 files, 6GB, 8000+ adult images. PC and compatibles. [Exp. #127.]

Graveyard Shift BBS. (415)397-1038, (510)540-6048. 14,400. 100% adult files, home of SF Strippers and Sluts™ image series. [Exp. #127.]

Lambda. (415)572-2591, 755-9439, 364-9049; (510)268-9891. Adult, gay/lesbian, all welcome, chat, matching, voicemail. Free trial. [Exp. #127.]

Nasty Playmates. (408)374-2627, 254-4221; (415)903-0898, 367-6283; (510)713-0703, 276-5446. 36 lines of naughty fun. Adult chat, Internet email, World BBS, matchmaker, and more. Over 18 only. Free trial, ladies free. [Exp. #127.]

Pathway BBS. (408)956-5600, (714)741-0900, (503)226-2665. 8-N-1, 24 hrs., 14,400. 16 lines. Seven CD-ROMs, live chat, games, adult only. Sysop: Robert Johnson. [Exp. #128.]

Paul Revere Network. (209)472-0843; (408)947-7800 (main), 281-0725; (707)427-1310; (916)361-2827. 24 hrs., 9600. Nationwide 50+ node BBS network of grassroots firearms rights activists. [Exp. #126.]

Pro-Line BBS. (408)226-3880, (415)465-0546, (510)614-2903. 24 hrs. 46 lines. Chat, matchmaking, lifestyles, email, files, fun, and more. Free trial. [Exp. #128.]

209

Stealth BBS. (209)536-0562. 14,400. Over 50 online games, over 400 files to choose from. [Exp. #126.]

310

The Edison BBS. (310)440-3825. 8-N-1, 300–14,400. Computer BBS for independent inventors. Password: Help. [Exp. #128.]

408

#1 Fun Seekers. (408)379-0958. 8-N-1, 24 hrs., 14,400. RIP graphics, IBM files for all ages. Adult too. Four lines. [Exp. #126.]

A32 BBS. (408)378-8252. 9600. Mac, FirstClass, OneNet member network, files, conferences. [Exp. #127.]

Amateur Action BBS. (408)263-3393, 14,400; (408)263-1868, 21,600. 8-N-1. 40 lines. 22,000+ adult amateur GIF files. [Exp. #128.]

Anatomically Correct BBS. (408)733-7429. 24 hrs., 14,400. Discussions of adult issues, 100+ X-rated stories, no GIF files, more. Free. Sysop: Howeird. [Exp. #128.]

Auto-PC. (408)229-0403. Find/sell motor vehicles online. Autos, trucks, cycles, boats, and more. Private owners and dealers welcome. Free. [Exp. #126.]

Autos Online. (408)356-1306, 356-3866, 358-2010. 1200–14,400. Shop new car dealers, by-owner sales. Use car locator service. Free. [Exp. #128.]

The Baseline Music Smorgasbord. (408)475-1834. 8-N-1, all baud rates. Mail-order music sales of collectibles, imports, and independent labels. Sysop: Daniel Duerr. [Exp. #127.]

The Beggar's Tomb. (408)395-1425. Adult GIFs, adult Internet newsgroups. [Exp. #128.]

Burn This Flag. (408)363-9766. 14,400. Female callers encouraged to call, two lines. NIRVANAnet. [Exp. #126.]

CETAC BBS. (408)258-4975. 8-N-1, 1200–14,400. Devoted to education, technology, and the Net; info about ITC and IMI. Sysop: Thomas J. Pitre. [Exp. #128.]

The Checkered Demon BBS. (408)264-9018. 8-N-1, 24 hrs., up to 14,400. Comic, fantasy, and RPG BBS! Focus on Hero Games products. Sysop: John Taber. [Exp. #127.]

Dads & Kids. (408)998-3237. 2400–14,400. Voice help (408)438-6658. IBM and Mac. Custody, legal, financial, counseling, grandparents, second families, men's groups, and more. Sysop: Ted Bohrer. [Exp. #128.]

Danny's Creation. (408)247-9302. 8-N-1, 2400–14,400. We have files, lots of them. Sysop: Danny. [Exp. #127.]

The Engineers' Club. (408)265-3353. 8-N-1, 24 hrs., 14,400. Technical users, files, and conferences. Internet. Limited access, $30 full access. Sysop: Robert Griffith. [Exp. #128.]

Escape To Other Worlds BBS. (408)956-1750. 8-N-1, 14,400. Four lines. SF/fantasy/comics, RIME, FIDO, chat, shareware, adult files, 2GB. [Exp. #127.]

Garlique Graphics Image Center. (408)847-0665, 847-5076. Excellence online, adult CDs. [Exp. #128.]

The Hidden Lair BBS. (408)979-0159. 24 hrs., 300–14,400. Multichat, adult files, online games, message bases. Free. Sysop: Drakkhen. [Exp. #126.]

The Lactation Station. (408)972-1937. 24 hrs., 1200–14,400. Adult board with topic messages, GIFs, and online doors. Free. [Exp. #128.]

LINCS-BBS. (408)294-6933. 8-N-1, up to 14,400. Resources for special needs of all ages. Disability files, national resource directory, Internet mail, Usenet. Sysop: Trudy Grable. [Exp. #126.]

The Lost Sector BBS. (408)865-1621. Chat! Chat! Chat! Chat! [Exp. #126.]

Matrix Online Service. (408)265-4660. 14,400. BBS gateway service, games, zines, files, Fido, chat. Full access first call. Sysop: Darryl Perry. [Exp. #128.]

Megamedia Multimedia BBS. (408)428-9901. 24 hrs., 2400–28,800. 13+GB of files, multimedia, Windows NT, and more. Msg. networks. Download files on first call. Sysop: Raaj Menon. [Exp. #126.]

Mongoose BBS. (408)733-3034. 24 hrs., 14,400. Two lines. SmartNet, over 4GB of the latest shareware on CD-ROM. Free. Sysop: Robert Yagmourian. [Exp. #127.]

Monterey Gaming System. (408)655-5555. 14,400 on all 32 lines. Free Internet email, live chat, contests, games. Free. [Exp. #127.]

The Mountain Mist BBS. (408)353-4866. 8-N-1, 24 hrs., 1200/2400/9600/ 14,400. Local and Intelec email. PCBoard 15.0/2. Specializing in legal files. OS/2, games, Windoze, Native Am., and other general interest files. Sysop: Christina M. Capurro. [Exp. #126.]

"Connect to the World through Internet"

Members receive **FREE** Email & Usenet access
(your Email address will be: your.name@wol.com)

☆ 26,000 Windows Files
☆ 1,500 New Files Every Month
☆ 3,000 OS/2 Files ☆ 36,000 DOS Files
☆ No Hourly And No Speed Surcharges
☆ 1 Year Membership, $69.95 (Total Cost)

Windows OnLine™
The Latest Software by Modem/BBS
FREE LIMITED TRIAL
(Modem) 510-736-8343
(510) 736-4376 Voice - (510) 736-8397 Fax

Bay Area BBSes

By Kathleen Creighton

Personal Freedom And The Online World

A few months ago, Bill Knutson, then a contract employee for Hewlett-Packard, was told that he'd have to submit to a "urine test" in order to secure his next contract position there. It seems that Hewlett-Packard, after many months of thrashing around about the urine-test policy, had finally defined which employees would be subject to the test. Contract employees were among them.

Insulted and angry, Knutson, a longtime contractor at HP, started posting about this on the WELL.

"HP insists that I pee into a bottle for the privilege of two months' work editing UNIX manual pages. They pay me no health benefits, give me no job security, and, in fact, provide nothing other than a check at the end of each billing period...

"Yet they presume to act as benevolent/snooping parent with my private life. The fact that I am shockingly abstemious and my urine flows crystal-clear from an unsullied font is beside the point. I won the contract based on my proven skills and excellent references from other successful projects with HP. But apparently good work is not the issue; their major concern is that my urine be clean. So much so that I'm supposed to drive an hour to go to a lab so someone can watch me perform my private functions." (Quoted with permission.)

A significant number of WELL users jumped into the fray. Knutson was standing on principle, but if he lost his ability to contract with HP, he'd lose 80% of his income. Author Howard Rheingold (*Virtual Reality* and *Virtual Community*) posted right away, "I'm asking around about possible jobs for Bill. I suggest that anybody else who knows anybody who employs tech writers do the same. There are two issues here: instructing HP, and helping Bill deal with the consequences of standing on his principles. Surely there must be people on the WELL who know people who have suitable work."

The support and ideas Knutson was getting from others online bolstered his ability to follow through and refuse the test. Four days later, he posted:

"Again, I want to thank everyone who has shown me such wonderful support. I feel like I'm getting hugged every time I log on. In response to requests, I'll put a resume and pointer to it online sometime today.

"As gratified as I am that I'm getting such positive backing from all you wonderful folks on a personal level, this developing groundswell is only tangentially about me. The real goal is to bring about the end of unfair, arbitrary, and unnecessary urine testing at Hewlett-Packard and, ultimately, other companies. I've chosen to make a stand after years of silent equivocation and, let me tell you, it feels great! There is power in this. Please join me at whatever level you feel comfortable."

Usenet newsgroup misc.jobs.misc has been the home of the parallel discussion. When Knutson describes the situation as being "only tangentially about me," he recounts the email he receives almost daily from people who never knew anyone who turned down a test, or that it was even possible to refuse, and

Continued...

SHOPPING FOR A COMPUTER DEALER THAT WON'T GIVE YOU THE RUNAROUND?

WITH 8 YEARS EXPERIENCE, WE KNOW HOW TO OFFER SOLUTIONS AT A PRICE YOU CAN AFFORD. AND, WE BACK OUR SYSTEMS WITH A LIFETIME ON LABOR WARRANTY!

IBM SLC2-66MHzW/ 64K Cache

- IBM 486 SLC W/MATH-CO
- 2 VESA LOCAL BUS BOARD
- AMI BIOS INTERNAL CLOCK BATTERY
- 4MB RAM EXP. TO 64MB RAM
- 1.2MB & 1.44MB FLOPPY
- 213MB HARD DRIVE
- SVGA NON-INTERLACED MONITOR
- WINDOWS ACCELERATOR SVGA CARD
- 101 KEYBOARD
- MICROSOFT MOUSE

$930

Ultra VESA System

- 486DX2-66/50/33 MHZ
- 486VLB 256K CACHE W/COOLING FAN
- PENTIUM OVERDRIVE P24T READY
- 4MB RAM EXP TO 64MB RAM
- 1.2MB AND 1.44MB FLOPPY
- 420MB HARD DRIVE
- SVGA NON-INTERLACED MONITOR
- 2 SERIAL, 1 PARALLEL, 1 GAME PORTS
- WINDOWS ACCELERATOR 32BIT SVGA CARD
- 101 KEYBOARD
- MICROSOFT MOUSE

486DX2-66MHz .. $1150
486DX-40MHz $1085
486DX-33MHz $1040

Multimedia VESA VLB System

FREE speakers & 4 CD Titles and joystick

- 486DX2-66/50/33 MHZ
- 486VLB 256K CACHE W/COOLING FAN
- PENTIUM OVERDRIVE P24T READY
- NEC SCSI DOUBLE SPEED CD-ROM
- PRO AUDIO SPECTRUM
- 4MB RAM EXP TO 64MB RAM
- 1.2MB AND 1.44MB FLOPPY
- 420MB HARD DRIVE
- SVGA NON-INTERLACED MONITOR
- 2 SERIAL, 1 PARALLEL, 1 GAME PORTS
- WINDOWS ACCELERATOR 32BIT SVGA CARD
- 101 KEYBOARD
- MICROSOFT MOUSE

486DX2-66MHz .. $1450
486DX-40MHz $1385
486DX-33MHz $1340

PCI 486DX2-66 Local Bus

New hot super fast system!

- 256K CACHE WRITE BACK
- 3 PCI BUS AND 4 ISA BUS SLOT
- 8MB UP TO 128MB RAM
- SCSI AND IDE CONTROLLER ON BOARD
- 420MB HARD DRIVE
- DIAMOND STEALTH 32 PCI VIDEO W/2MB VRAM
- ADI 4G 15" SVGA MONITOR
- 1.2MB AND 1.44MB FLOPPY
- 101 KEYBOARD
- MICROSOFT MOUSE
- 14,400 FAX MODEM

$1899

Pentium VESA Local Bus System

- INTEL PENTIUM 60MHZ PROCESSOR
- 8MB RAM UP TO 128MB RAM
- 540MB SCSI HARD DRIVE
- DIAMOND STEALTH 32 PCI VIDEO W/2MB VRAM
- ADI 4G 15" SVGA MONITOR
- 1.2MB & 1.44MB FLOPPY
- 101 KEYBOARD
- MICROSOFT MOUSE

$2265

Pentium PCI Local Bus System

90MHZ

- INTEL PENTIUM 90MHZ PROCESSOR
- PCI BUS AND 4 ISA BUS SLOTS
- 16MB UP TO 128MB RAM (72-BIN)
- 1.08GB SCSI-II QUANTUM HD
- PCI SCSI II CONTROLLER (DRIVERS FOR OS/2 WINDOWS NT UNIX)
- DIAMOND STEALTH 64 PCI VIDEO W/2MB VRAM
- ADI 4G 15" SVGA MONITOR
- 1.2MB AND 1.44MB FLOPPY
- 101 KEYBOARD
- MICROSOFT MOUSE
- 14,400B FAX MODEM

$3398

1 Year Parts and Lifetime on Labor Warranty on All Systems

VGA CARDS

Diamond Stealth 24 VLB 1MB	$125
Diamond Stealth 32 VLB/PCI 2MB	$165
Diamond Stealth 64 VLB/PCI 2MB	$285
Diamond Viper SE 2MB	$285
ATI Ultra Pro VLB 1MB	$110
ATI Win Turbo 64 PCI 2MB	$285
Orchid Kelvin 64 VLB 1MB	$125

CONTROLLER CARDS

IDE VLB 2FD/2HD	$18
SCSI Adaptec 1542CF	$168
SCSI Adaptec 2842	$230
SCSI Adaptec 2940	$230

MOTHERBOARD WITH CPU

Pentium 99MHz/256C Super Board USA.	$1090
Pentium 66MHz/256C PCI	$890
Pentium 60MHz/256C PCI	$760
486DX2-66MHz 256/C PCI	$355
486DX2-66MHz VLB	$255
486DX-40MHz VLB	$240
486DX-33MHz VLB	$225

HARD DRIVES

CONNER/MAXTOR/QUANTUM

IDE 210MB	$185
IDE 420MB	$220
IDE 540MB	$285
SCSI 540MB	$320
SCSI 1GB	$690
SCSI 1.7GB	$990

CD ROM AND SOUND CARD

NEC 3XI SCSI	$295
NEC 210 SCSI	$195
Toshiba 3401 SCSI	$258
Panasonic 562 IDE	$140
Sound Blaster 16	$90
Sound Blaster MCD	$98
Sound Blaster SCSI 2	$138

MONTHLY SPECIAL

MULTIMEDIA UPGRADE KIT

- NEC SCSI Double Speed CD-ROM
- Pro Audio Spectrum (OEM)
- Labtec Speakers
- 5 CD Titles

Priced to sell at $300

GENERAL MICRO CO.

TEL 415-573-1454 · FAX 415-573-0501
1163 CHESS DRIVE SUITE D FOSTER CITY, CA 94404
BUS HRS: MON-FRI 9:00-6:00 · SAT 11:00-4:00

Prices subject to change w/o notice. Not responsible for typographical errors.

BULLETIN BOARDS cont.

Mountain Retreat. (408)335-4595. 24 hrs., 14,400. FidoNet, 2.9GB HD, 20,000+ files, Turbo Pascal is the specialty. Sysop: John Jamieson. [Exp. #128.]

Network Interface Board. (408)648-1263. 8-N-1, 24 hrs., 14,400. Four lines. Novell networking, CNE training info., Internet email and news. No adult files. Free. Sysop: Gregg McWilliams, CNE. [Exp. #127.]

Nitelog BBS. (408)655-1096 (300–14,400), 655-4218 (300–28,800). 24 hrs. 26 lines. DOS, Windows, OS/2, UNIX, Mac, Amiga, Newton, Win NT and adult files, 10.3GB. Sysop: Karl Van Lear. [Exp. #128.]

Pacific Exchange BBS. (408)946-8561. 16 lines. 70,000+ files, Internet mail, chat, USA Today news, since 1986. [Exp. #127.]

Paradise City BBS. (408)280-6630. 2400–57,600. Over 30,000 newest IBM and adult files, RIP EGA graphics, mouse support. Free. Sysop: Jim Reed. [Exp. #127.]

Positive Image Studio. (408)270-8916. 8-N-1 24 hrs., 300–14,400. FirstClass, One-Net member, files, Mac, adult, PC/Win. [Exp. #128.]

Ring Of Fire BBS. (408)248-2076. Silicon Valley NetWare Users Group BBS specializing in Novell, NT, and Windows/Work Groups info and files. [Exp. #127.]

SAGE Experience BBS. (408)353-6131. Creating a world that works for everyone through Heart, Action, and Humor. [Exp. #128.]

San Jose Connection. (408)956-8819. 8-N-1, 24 hrs., 300–14,400. 2GB online, four CDs, running PCBoard, adult oriented, gay/straight. Sysops: Earl, Manuel, and Ed. [Exp. #128.]

The Screamin' Mac BBS. (408)257-2029. 14,400. Over 9000 Mac files plus over 20 GIFs. Sysop: Jeff Johnson. [Exp. #127.]

The Shuttle BBS. (408)289-1911. 24 hrs., 28,800. 2.5GB of files, Doom, multimedia, online games, and more. Sysop: Michael Vedda. [Exp. #128.]

The Support Network BBS. (408)259-0297. 8-N-1, 24hrs., 1200–14,400. ADA Net, ABLEDATA database online, Trace Research Center Library, educational files, RIP graphics. Sysop: Frank Arnold. [Exp. #126.]

The Virtual Reality BBS. (408)246-5434. 8-N-1, 300–14,400. Games, files, and Net mail. Sysop: Jim Busby. [Exp. #126.]

VisionSoft BBS. (408)626-0302 (300–2400), 625-6580 (9600–14,400), 624-5879 (14,400–28,800). 10 lines. Chat forum, CD-ROM, multi-user online game, Usenet, multi-message, Internet pending. [Exp. #126.]

YuropeBBS. (408)257-5071. 24 hrs., 14,400. Two lines. News, info, and files on former Yugoslavia. Usenet, Internet mail. Free. Sysop: Miroslav Dragojevic. [Exp. #128.]

415

A.S.D.I.P. (415)468-3886. 14,400. Six lines. We deal in adult issues, 34,000 files, 10GB+. Free trial. [Exp. #128.]

The Baud BBS System. (415)343-5799. 14,400. RIP oriented (ANSI too), online RIP games, thousands of files. Free access. [Exp. #126.]

Bay Area Luv Connection. (415)822-7550. 24 hrs., 16 lines. Adult board. Fee, women free. Voice: (415)239-1028. Sysop: Ronni. [Exp. #126.]

Career Connections. (415)917-2129, 917-2125. 8-N-1. View and respond online directly to the recruiters. Telnet: career.com . Free. Sysop: S. Dave. [Exp. #126.]

Compool BBS. (415)961-9182. Three lines. DOS and Apple files. Los Altos. Free membership. Sysop: Andy Bajka. [Exp. #128.]

DPNet BBS. (415)788-8663. 8-N-1, 9600–14,400. Free consultant job listings, Usenet newsgroups, professional organizations, and technical SIGs. [Exp. #127.]

Dragnet BBS. (415)917-0227. 24 hrs., 300–2400. Files for IBM, Macintosh, and Atari; msg. bases and email. Free. Sysop: Matt McAlister. [Exp. #128.]

Flying High BBS. (415)467-2303. 24 hrs., 2400–14,400. Gay/straight Asian, XXX, Windows files, games. 18+ for adult access. Free. [Exp. #128.]

Fog City. (415)863-9697. 8-N-1. Gay & lesbian community/chat, matchmaking, CD-ROMs, games, multiline, 2.4GB. Since 1986. [Exp. #127.]

Gamers BBS. (415)592-4496. 8-N-1, 24 hrs., 2400–14,400. Hints, tips, walk-throughs for many video and PC games, more. Free. Sysop: Anthony. [Exp. #128.]

Games & Stuff BBS. (415)369-1110. 8-N-1, 24 hrs., 14,400. Lots of shareware games and utilities, adult files with reg. 30 min. free/day. [Exp. #126.]

Golden Gate Computer Society BBS. (415)457-2516. 24 hrs., 14,400. Four lines. 2GB of files, ILink, Cal-Link, Usenet and Internet email ($24/year). [Exp. #126.]

Home Buyer's Fair! Online. (415)570-7133. 24 hrs., 9600. Home buying information; Q&A, mortgage rates, first-timer programs, more. [Exp. #128.]

IBBS West. (415)564-9996. 8-N-1, 24 hrs., 300–14,400. Five lines. PC & compatibles, shareware, utils., adult GIFs, CD-ROM, 13,000 files. Fee. [Exp. #127.]

The Informer BBS. (415)468-6713, 468-6714, 468-6715. 24 hrs., 2400–28,800. Intelec, FamNet, WildNet, Fido, OS/2 Net, Internet, Sci Fi Conf, operating systems, tech specs, and more. Sysop: John Custer. [Exp. #126.]

The Infoway BBS. (415)898-8427. 8-N-1, 14,400. Two lines. Internet email and Usenet news, Marin County calendar and issues, weather. Free. [Exp. #127.]

Intimate Images. (415)598-0898. 1200–16,800. Original adult images and video clips. The Bay Area's finest adult BBS. [Exp. #127.]

Key Software Products BBS. (415)364-9847. 5 pm–8 am M–F, 24 hrs. wknds. 1200/2400/9600. Tech support for the Last Byte Memory Manager. Internet email, fax-mail, Simtel-20 shareware. Free. Sysop: Dan Lewis [Exp. #128.]

LegalNet. (415)454-0772. 14,400. Join the California online legal community—lawyers only! [Exp. #126.]

Lincoln's Cabin BBS. (415)752-4490. 2400–28,800. Internet email, Usenet, RIME, Boardwatch and Connect magazines online, RIP graphics. Free trial. [Exp. #127.]

The Mac Daddy BBS. (415)587-9052. 24 hrs., 14,400. Two nodes. All Mac FirstClass, FidoNet, OneNet, two CDs, tons of local files. Sysop: Jonathan Mergy, Robert Pomon. [Exp. #127.]

Marin Online. (415)457-1884. 14,400. The online community of Marin—travel online at 14.4 to beautiful Marin. Sysop: James Preston. [Exp. #126.]

The MIDI & Multimedia Exchange BBS. (415)771-1788. 8-N-1, .MID, .MOD, .WAV, and virtual reality. Sysop: Walt Perko. [Exp. #128.]

The Nebuolic Cheese BBS. (415)949-1788. 8-N-1, 24 hrs., 2400–14,400. 120+ msgs., 340MB files, CD-ROM, doors, Internet/Usenet mail. [Exp. #127.]

New Dork Sublime. (415)864-DORK, 255-NERD. 300–14,400. Subliminal news for new dorks everywhere, NIRVANAnet node 9:900/10. Sysop: Biffnix. [Exp. #126.]

NightSHADE Online Services. (415)456-2126. 8-N-1, 24 hrs., 2400–14,400. Multinode, 5+GB, XXX GIFs, games, applications, DOS, Windows, OS/2, 1000+ Internet conf., email-ftp. [Exp. #126.]

San Francisco PC Users Group BBS. (415)621-2609. 8-N-1, 24 hrs., 1200–14,400. Sysop: Richard Couture. [Exp. #128.]

San Francisco Robotics Society Of America BBS. (415)648-6427. 14,400. Programs, tools, and information for hobby robot builders. [Exp. #128.]

Is Your Listing Missing?

Free user group and association listings are limited to the group's name, meeting information, contact name and phone number, and a ten-word description. They will be **deleted at six-month intervals** to ensure timeliness and accuracy of information.

Free BBS listings are limited to the board's name, phone number, hours, baud rates, parameters, and a ten-word description. Please let our readers know if your BBS is free or requires a fee. Because we have an ongoing problem of boards shutting down without telling us, much to the annoyance of would-be callers and the new phone number's owner alike, we will **delete these listings after they've run three months.** The notice at the end of the listing—Exp. #xxx—refers to the last issue number it will appear in unless renewed.

You can update or renew your listings at any time. If yours is missing, send your listing information to:

US Mail should go to: MicroTimes User Group, 3470 Buskirk Ave., Pleasant Hill, CA 94523. **Faxes** are welcome at (510)934-3958. **Email** can be sent to: microx@well.sf.ca.us or MCI:MICROTIMES.

BBS Spotlight cont.

what the ramifications of refusal were.

The larger story here is about the ramifications of sharing information, and the fact that "the net," that conglomeration of all public online space, is a broader audience for what used to be our private and often isolating experiences. We are participating in a medium in which we exchange information freely, without interference from advertising agencies or Nielsen ratings. Individually, we hold the power instead.

Knutson got another job through a WELL user. He says he'll stay involved in the urine-testing issue for a while, and has composed a list of new types of materials he'd like to bring to the net. He can be reached at wknutson@well.sf.ca.us .

Amateur Action BBS

As you may have heard, while "the net" is still relatively free of interference from advertising agencies or Nielsen ratings, some areas of federal government are being less than sanguine about so much "freedom."

A postal inspector in Tennessee downloaded some .GIFs from Amateur Action BBS in Milpitas and took them to the federal prosecutor for the Sixth District Court (Tennessee, Kentucky, Ohio). At trial, the owners of the BBS were found guilty of eleven counts of "distributing pornography across state lines."

Amateur Action BBS isn't available to just anybody who wants to log on. The verification procedures are tight. But it didn't protect sysop Robert Thomas and his wife, who are now facing a maximum sentence of five years for each count and a $250,000 fine.

This is a typical "standards of the community" obscenity case, except that here it's been demonstrated that someone in Tennessee can call in to every existing BBS in the United States in search of material that would be considered "obscene" in Tennessee and that the federal prosecutor is quite likely to obtain a conviction.

The conviction will be appealed. It's too early to say whether this case will make it to the Supreme Court for review, but if this case doesn't, we can be certain that eventually there will be another one just like it that will.

The Media: Just Say No

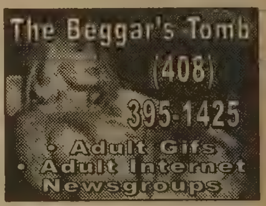
Bob Rossney, online columnist for the *San Francisco Chronicle*, scored big on behalf of those of us frustrated with media representations of "the net" in his August 4, 1994, column.

"Yes, people are using the net to distribute dirty pictures. But using the net to get pornography is like using your car as a paperweight: it works, but there are much easier ways to get it done…

"But as far as smut is concerned, this nation has the most efficient system for the delivery of pornography that the human race has ever seen, and it isn't the net."

The full text of this column, which includes some choice words about the media treatment of the nonexistent "pornography ring" at Lawrence Livermore Labs, is available by email from rbr@well.sf.ca.us . Bob asks that you not repost it publicly, but will gladly send you a copy if you request one. Highly recommended reading. ■

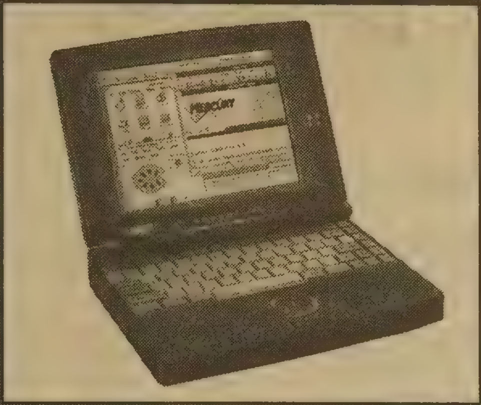
Copyright © 1994 by Kathleen Creighton. All rights reserved.


The Beggar's Tomb
(408)
395-1425
• Adult Gifs
• Adult Internet Newsgroups

LEGEND Graphics Online
✻ SuperVGA Photo Images
✻ Adult GIF's, MoviePICs
Download Computer Graphics of tomorrow, today!
Nation's One Stop Graphics BBS
VISA MasterCard AMEX
Modem:
(909) 689-9229
(NO per min./hrly fees)

NOVACOR INC.

OPENNOTE
A PERSONALIZABLE NOTEBOOK THAT GROWS WITH YOU!



Unlike Other Notebook Designs, Nova's OpenNote Is Designed With Expandability And Upgradability In Mind. It Means You Can Custom Make Your Notebook According To The Configuration You Want, At The Price You Want! Why Pay More For Features Or Options You Don't Really Need.

486SX-33
MONO w/4MB
$995

UPGRADES:

CPU........Add	Hard Drive....Add
DX-33....$70	
DX2-50...$120	170 MB....$265
DX2-66...$190	256 MB....$350
DX4-100..$600	340MB....$415

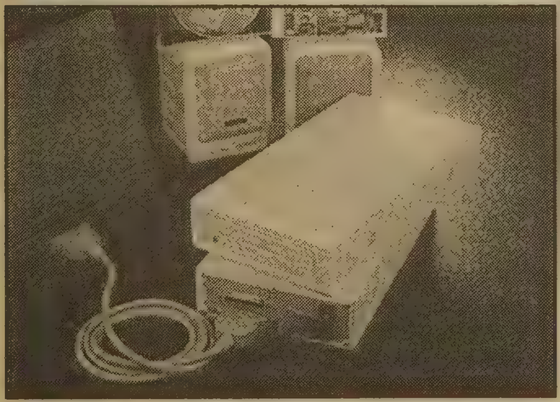
Dual Scan Color.......Add $450

FEATURES:

- Upgradable CPU- Supports All Speeds of 486 From 486SX-33 to DX4-100 & Pentium P24T
- Standard 72 Pin Memory SIMM Module, 2.5" IDE HD
- Proprietary Power Management Chip Means Larger Battery Life
- Use Of Proven Technology = High Reliability
- Standard With 1.44 FD, 1S/1P, PCMCIA Type II Slot, Track Ball, Battery, Auto-Switchable AC Adapter, Only 5.8 Lbs w/Battery

EXTERNAL CD-ROM SYSTEM FOR NOTEBOOKS AND DESKTOP COMPUTERS

"Allows You To Hook CD-ROM To Notebook Thru Printer Port or SCSI, AT BUS To Desktop"



TP616S

EXTERNAL CD-ROM CASE w/ SCSI PORT INTERFACE

- SCSI Cable w/15W Power Supply
- Teac or Equal Double Speed CD-ROM Drive

$215

Case Only $60

TP161P/ATCD

EXTERNAL CD-ROM CASE w/PRINTER PORT AT BUS INTERFACE

- Cable w/15W Power Supply
- Panasonic or Mitsumi Double Speed CD-ROM Drive

$245

Case Only $80

TP616 AT/CD

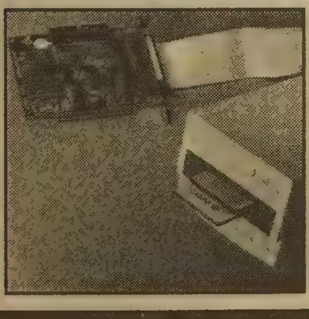
EXTERNAL CD-ROM CASE w/AT BUS CONTROLLER

- Double Speed CD-ROM Drive

$195

Case Only $55

PCMCIA CARD READER/WRITER FOR YOUR DESKTOP!



- Full Implementation of Two PCMCIA 2.01/JEIDA 4.1pc Card Sockets
- Allows IC Card and I/O Card Hot Swap
- Supports Type II, III
- GUARANTEED 100% COMPATIBLE!

PCMI-365 $195

SCSI Digital Active Terminator

- Improves SCSI Performance
- Eliminates SCSI Line Pulse Fluctuations
- IC Controlled To Decrease The Retries Creating More Reliable Data Transmission
- LED Indicators and Diagnostic Functions
- Powered By SCSI Device
- Supports 50 Pins SCSI Centronic Connector

$39

SURGE SUPPRESSOR EXTENSION CORD & POWER SAVER

- ECO Sockets Turns Off Automatically After PC Idle
- Six Sockets Are Surge & Spike Protection
- Save Up To 35% of Power Consumption

$39

NOVACOR INC.
Computer Systems & Components Since 1982
780 MONTAGUE EXP. #104, SAN JOSE, CA 95131

(408) 441-6500
SALES: (800) 486-6682 Fax: (408) 441-6811
DEALER INQUIRIES WELCOME, CORPORATE, GOV'T PO's WELCOME
PRICE SUBJECT TO CHANGE w/o NOTICE

BULLETIN BOARDS cont.

The Shareware Exchange! (415)992-4320. 8-N-1, 24 hrs., up to 14,400. Nine networks, files, games, Apogee ID software creation site. Sysop: Christopher Jong. [Exp. #128.]

Solar Hydrogen BBS. (415)494-3116. 8-N-1, 1200–14,400. Alternative energy info—prosperity without pollution. Sysop: Howard H. Smith. [Exp. #127.]

Springboard. (415)327-4591. 14,400. Eight lines. Great discussions, free Internet forums and email, Reuters/AP news. Free 30-day trial. Sysops: Wendie, Mike, Lisa, Bob, and Scott. [Exp. #126.]

Symmetrix BBS. (415)382-6679. 8-N-1, 24 hrs., 1200–14,400. Online games, 600+MB of shareware programs. [Exp. #128.]

Toad Hall BBS. (415)595-2427. Mature user system, no X-rated graphics, 36,000 files, conferences, Internet email, Usenet newsgroups. Free trial. Sysop: Gordon Anderson. [Exp. #128.]

Uncle D's Directory. (415)364-3001. High-speed US Robotics. Online service for the mentally aroused. 1.5GB games, unprotects, RIME, classifieds, doors. Free. [Exp. #128.]

/usr/school BBS. (415)564-8896. 8-N-1, 24 hrs., 2400. Learn Internet, C, and UNIX by modem. Login: guest. Sysop: Dennis McNamara. [Exp. #127.]

VidGame BBS. (415)742-6486, 2400–16,800; 742-6618, 28,800. Nine nodes, steamy adult GIFs, games, 8.5+GB, utils. Free Internet email, newsgroups, FTP-mail. Sysop: George Hassmer. [Exp. #127.]

Virtual Pleasures BBS. (415)802-0500. 24 hrs., up to 14,400. 24 lines (local #s all around Bay Area). Literate adult chat, Internet access, forums, personals, games, erotic matchmaker, and more. Fee. [Exp. #127.]

Wetware Diversions Public UNIX. (415)826-0397. 8-N-1, 24 hrs., 1200/2400. Eight lines. Full Usenet news. Sysop: Eric Swanson (editor@wet.UUCP). [Exp. #127.]

Window World BBS. (415)931-0649. 24 hrs. For people who use Windows-type software; info, shareware, chat. Sysop: Bob Cram. [Exp. #126.]

Worldnet Direct BBS. (415)974-7303 (14,400), 974-7305 (28,800). PC World back issues; shareware, macros/models from PC World Lotus edition; DOS, Windows, OS/2 files; and more. Sysop: Nancy Miller. [Exp. #126.]

510

& The Temple Of The Screaming Electron. (510)935-5845. 14,400. Two lines. As seen on Hard Copy. 442MB of unusual text. NIRVANAnet HQ. [Exp. #126.]

8-Bit Apple User Group BBS. (510)294-8052. 24 hrs., 300–2400. Apple II, UL/DL, email, games. Free. Sysop: Noel Anklam. [Exp. #126.]

Aaron Construction Company BBS. (510)534-9363. 8-N-1, 24 hrs., 1200–14,400. Construction Q&A, files, Paul Revere and FamilyNet echo conferences. Free. [Exp. #128.]

Activist. (510)532-6248. Hot info fer realpolitik junkies, infobahn tyros, culture buzzards, and the toiling masses. Sysop: Walter Alter. [Exp. #126.]

Bay Area Mega Board. (510)247-8300, 12 lines @ 14,400; 247-8313, four lines @ 28,800. UltraChat, games, news, and Internet (@bamb.com). Free and fee. Sysop: Sam Thompson. [Exp. #128.]

Bayline BBS. (510)886-9401. 14,400. Eight lines. African-American network, Internet email/Usenet, RIP graphics, games, discussions, and more. Sysop: A. Mitchell. [Exp. #126.]

Beyond Infinity BBS. (510)283-1991. The greatest graphical interface BBS designed. Complete RIP graphics. Tons of files, games. [Exp. #127.]

Bust Out BBS. (510)888-1443. 24 hrs., up to 28,800. Nine nodes, 20+GB, huge msg. and file network incl. Internet (many adult), and more. Sysop: Alex J. Riggs. [Exp. #128.]

Callisto Tower BBS. (510)794-9788. 24 hrs., 2400–14,400. Local and out-of-state echomail nets, registered doors, CD-ROM files. Free. Sysop: Gus Damian. [Exp. #128.]

Camelot BBS. (510)494-1060. 1200–14,400. Files, sports, magic, magazines, shows, email, shopping, games. No fee. [Exp. #128.]

Camphor Fountain BBS. (510)547-5741. 8-N-1, 24 hrs., 2400–14,400. Interfaith, all religions, seekers welcome, Baha'iNet, FidoNet, 100+ msg. areas. Free. [Exp. #128.]

Caxius BBS. (510)895-6961. 24 hrs., 300–14,400. Technical focus, FidoNet & PCC Net support, 60+ msg bases, active debate forum. Free. Sysop: Ed Correia. [Exp. #127.]

Classified BBS. (510)481-8217, 537-3853 (Hayward). 14,400–25,000. Three lines. Classified ads, files, online games. [Exp. #128.]

Club BBS. (510)895-8022. BBS for the San Leandro (Atari)Computer Club. Free. Sysop: Crazy. [Exp. #128.]

The Dragonhead BBS. (510)417-8718. 8-N-1, 24 hrs., 300–14,400. Online games, local and echo msg. bases, CD-ROM files, off-line mail reader. Free. Sysop: Ray Khechen. [Exp. #127.]

Dr. Jack's Thing. (510)689-4022. 6:00 pm–8:00 am. 14,400. Specializing in WAVs and GIFs, plus all the other stuff. Thousands of new files, programs, utilities. Free/pay. [Exp. #127.]

The Eye Candy Store BBS. (510)235-4807. 24 hrs., 2400–14,400. Adult BBS, no one under 18, low fee, instant access. [Exp. #128.]

The Full Moon BBS. (510)427-6956, 432-0810. 2400–14,400. Shareware, games, online games, adult, msg. bases. Soon adding NetMail. Sysops: Cruzdude and Dave Eklove. [Exp. #128.]

Amateur Action "Live"
ONE•ON•ONE HOT TALK 24hrs./day
1•800•469•7588 $3.99/min. 18 yrs. & older
LIVE PSYCHIC HOTLINE 24 hrs./day
Advice & Predictions: Love, Sex, Marriage & Money
1•800•909•LIVE (5483) $3.99/min 18 yrs & older
No CC Needed

Amateur Action BBS
World's Largest Collection of Amateur Adult GIF Files.
Over 23,000 GIFs on line.
"The Information Super Highway"
"The Nastiest Place On Earth"
(408) 263-3393 28,800 V.FC
40 High Speed Lines
US Robotics 28,800 baud Modems on all lines
Easy Connection! No Waiting!
VISA DISCOVER MasterCard

PACIFIC EXCHANGE
"The Best BBS Since 1986"
- 70,000 DOS/Windows Files
- 20,000 Latest Adult Files
- FREE InterNET Mailboxes
- FREE Giants/Sharks Tickets
- USA Today Online Newspaper
- Link to 10ft. Satellite Dish
- 16 High Speed Modem Lines
- Full Access - Only $25/Year
(408) 946-8561

TERMINAL FANTASIES
A Windows GUI BBS
View GIFs, download, and chat simultaneously!
Gigs of Hot Adult GIFs
15 CD-ROM's Online!
FORBIDDEN SUBJECTS
CICA Windows Archive
8 NODES USR 14.4 - NO WAITING!
310-915-6135
Visa/MasterCard

Rainbow Computers

We Guarantee The Best Price In Town!
Please Call For Price Update

SYSTEM	M/B + CPU	BASIC SYSTEM	BASIC SYS 210MB HD MGP CARD &14" MONO MONITOR	BASIC SYS 210MB HD SVGA CARD & 14" SVGA MONITOR	BASIC SYS 4MB RAM 210MB HD 1.2&1.44 DR SVGA CARD & 14" SVGA MONITOR	MULTIMEDIA SYSTEMS CREATIVE DISCOVERY CD 16 KIT Incl: Sound Blaster Pro 16, Panasonic CD-ROM (Dbl Spd) Speakers, CD Titles, Microphone w/BASIC SYSTEM 4MB RAM, 210MB HDD 1.2 & 1.44 DRIVE SVGA CARD & 14" SVGA MONITOR
PENTIUM 90 256C VLB PCI	$1065	$1190	$1425	$1558	$1695	$1994
PENTIUM 66 256C PCI	845	970	1205	1338	1475	1774
PENTIUM 60 256C PCI	725	850	1085	1218	1355	1654
INTEL 486DX4-100 256C VLB	638	765	998	1130	1268	1567
INTEL 486DX2-66 128C VLB	330	456	690	823	960	1259
INTEL 486DX2-50 128C VLB	298	421	658	790	928	1227
INTEL 486DX-33 128C VLB	290	416	650	783	920	1219
INTEL 486SX-33 128C VLB	170	296	530	663	800	1099
INTEL 486SX-25 128C VLB	150	276	510	643	780	1079
AMD 486DX2-66 128C VLB	296	422	656	789	926	1225
AMD 486DX2-50 128C VLB	256	382	616	749	886	1185
AMD 486DX-40 128C VLB	246	372	606	739	876	1175
IBM 486SLC2-66 64C VLB	230	356	590	723	860	1159
IBM 486SLC2-50 64C VLB	220	346	580	713	850	1149
CYRIX 486DX-50 128C VLB	300	426	660	795	930	1229
CYRIX 486DX2-50 128C VLB	237	363	597	730	867	1166
CYRIX 486DX-40 128C VLB	220	346	580	713	850	1149
CYRIX 486DX-33 128C VLB	210	336	570	703	840	1139
INTEL 486SX-33 ISA	158	284	518	650	788	1087
INTEL 486SX-25 ISA	135	260	495	628	765	1064
IBM 486SLC-50	170	296	530	663	800	1099
486DLC-40 128C W/MATH CHIP	165	290	525	658	795	1094
386DX-40 128K	89	225	459	592	739	1038

UPGRADES: Please Add

AIR VLB 128K Motherboard	$40
Genoa VLB 256K Motherboard	40
250 MB H.D.	20
340 MB H.D.	40
420 MB H.D.	60
540 MB H.D.	125
14" .28 Monitor	20
14" .28 Non-Interlace Monitor	40
15" .28 Non-Interlace Monitor	135
VLB IDE/IO	15
Promise VLB IDE/IO w/512K	95
Orchid Kelvin VLB 1MB	99
Orchid Celsius VLB 1 MB	99
SVGA Card VLB 1 MB	35
Spider VLB 1 MB	60

BASIC SYSTEMS CONFIGURATION:

Motherboard & CPU, 1 MB RAM, IDE I/O of 2HD/2FD/2S/1P/1G Ports, 1.44 Floppy Drive, Mini-Tower Case w/P.S., 101 Keyboard

MULTIMEDIA

CREATIVE DISCOVERY CD-16 KIT

- Sound Blaster Pro 16
- Speakers
- Microphone
- CD-ROM (Double Speed)
- CD Titles

$299

CD-ROM SOUND SOUND CARDS

Mitsumi CD-ROM (Double Speed) w/Card	$128
Panasonic CD-562	$128
Toshiba XM 3401 B SCSI CD-ROM	$260
NEC 510 3XI Triple Speed	$319
Spectrum 16 Bit SCSI Sound Card	$99
Sound Blaster 16	$97
Sound Blaster 16 SCSI II	$139

HARD DISK DRIVES

210 MB	$165
250 MB	180
340 MB	195
420 MB	210
540 MB	275
1.2 GB SCSI	630

DISK CONTROLLERS & I/O CARDS

IDE I/O Card w/ Cable	$10
IDE/I/O VLB Card w/Cable	18
Promise DC 420 VLB w/512K	99
Promise 4030 VL-II VLB (Exp to 16 MB)	110
Adaptec 1542 C SCSI	170
Adaptec 2842 VESA SCSI	265
Adaptec 2742 EISA SCSI	285
Adaptec 2940 PCI SCSI	210

MODEMS

Fax Modem (9600 Fax, 2400 Modem)	$29
Fax Modem (14400 Fax, 14400 Modem)	69

MONITORS

14" Mono Amber	$69
14" VGA Amber	90
SVGA (1024x768) .39	175
SVGA (1024x768) .28	195
SVGA (1024x768) .28 NI	210
Impression-5 15"	310
ViewSonic-15 E15"	355
ViewSonic-15 15"	430
ViewSonic-17G 17"	780
MAG 17 17"	649
NEC 3V	455

VIDEO CARDS

Mono Graphics	$15
Trident SVGA, 512K RAM	36
Trident SVGA, 1 MB RAM	55
Trident SVGA, 1 MB RAM, VLB	65
Cirrus Logic 1 MB, VLB	65
Orchid Kelvin 1/2MB VLB	127/177
Orchid Celsius 1MB/2MB	125/175
Diamond Stealth 24/Pro 1MB	130/205
Diamond Viper 2 MB VRAM, VLB Accelerator	305
Diamond Viper PCI 1 MB	255

MISCELLANEOUS

Keyboard 101, Mitsumi/Keytronic	$15/26
Mouse 3 Button	8
Microsoft Mouse	27
Logitech MouseMan	60
Logitech Trackman	72
230W Power Supply	35
Mini Tower or Desktop Case w/PS	43
Mid/Full Tower Case w/PS	63/86
Colorado Tape Back-Up 250 MB	145
Conner 250 Tape Back-Up	145
486 CPU Cooling Fan	7
Speakers 80 Watts	49
Speakers 25 Watts	40
RAMs, SIMMs, Others	CALL
Sony 4 GB Tape Back-Up SCSI	860

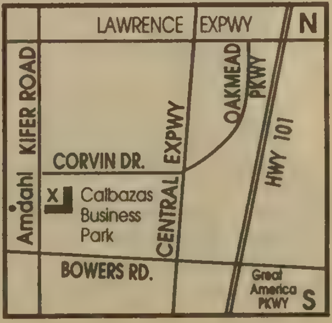
RAINBOW COMPUTERS

M-F: 9-6:30
Sat: 10-4

(408) 774-9005

3259 KIFER RD.
SANTA CLARA, CA 95051
Fax: (408) 774-9007

- COMPANY, GOVERNMENT EDUCATION, PO's WELCOME
- UPS Shipping Daily
- All Prices And Contents Subject To Change w/o Notice
- Prices Reflect Cash Discount, Terms On Credit Approval
- Not Responsible For Typographic Errors
- 1 Year Parts, 3 Years Labor Warranty



USER GROUPS

AMIGA

AGA. Meetings: 7th of each month, 7:00 pm, downtown SF. Graphics users group for all Amiga users of 2-D, 3-D, animation, multimedia, and video software. Call: Ollie, (415)863-8792. [Exp. #130.]

AUM—Amiga Users Of Marin. Meetings: 3rd Wed., 7:30 pm, College of Marin Science Center, Rm. 191, Kentfield. Desktop Video SIG, Rm. 192, 6:00 pm. Call: (415)479-6717. BBS: (415)459-6621. [Exp. #126.]

AWEST Amiga Users In SF. Meetings: 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission St. (near Ocean), San Francisco. Call: (415)584-8406. [Exp. #126.]

FAUG—First Amiga User's Group. Meetings: 1st Tues., 7:30 pm, HT Electronics, 275 N. Mathilda Ave., Sunnyvale. Q&A, new product demos, public domain software. Call: Mike Fischer, (415)855-9816, BBS (415)341-7566. [Exp. #129.]

RE-AMIGA Redwood Empire Amiga User Group. Meetings: 2nd Tues., 7:30 pm, Rohnert Park Jr. HS, Rm. C-5, 7165 Burton Ave., Rohnert Park. Call: (707)523-9978. BBS: (707)539-6944. [Exp. #126.]

TOGA—The Other Group Of Amigoids. Meetings: Varying Sat., 12:30 pm, Milpitas Community Library, 40 N. Milpitas Blvd., Milpitas. An informal group to share ideas, PD software, and information. Call: Lawrence Brown, (408)984-6036; Randy Abel, (408)356-9405; toga@cup.portal.com . [Exp. #127.]

APPLE

Gravenstein Apple Users. Meetings: 3rd Sat., 10:00 am, Grant School, 200 Grant Ave., Rm. #B4, Petaluma. Call: BBS (707)794-9333, Jack McKenna sysop. [Exp. #129.]

PAUG—Peninsula Apple User Group. Meetings: 3rd Thurs., 7:00 pm, Ampex Cafeteria, 411 Broadway, Redwood City. Beginners and advanced, Q&A, new product demos, public domain software. Call: Kent Fillmore, (415)571-1433. [Exp. #131.]

P.I.E. Apple IIGS SIG. Meetings: 3rd Tues., 7:00 pm, Wilcox High School, Rm. #205, 3250 Monroe St., Santa Clara. Call: Philip Fontaine, (408)258-7641. [Exp. #129.]

San Leandro Apple Eaters Users Group. Meetings: 1st Thurs., 7:30 pm, San Leandro High School, Rm. #204, 2200 Bancroft Ave., San Leandro. Call: Stan (510)351-3973 or Ed (510)651-8521. [Exp. #129.]

SPC Apple User Group. Meetings: 2nd Tues., 7:30 pm, Fremont Main Public Library. The Society for Prevention of Cruelty to Apple Computers Users Group supports all Apple and Macintosh computers. Call: Dean Fearn, (510)881-9160. [Exp. #129.]

Stockton Apple Users. Meetings: 3rd Wed., 7:00 pm, Online Connecting Point Computer Store, 5756 Pacific Ave., Stockton. Call: Connie Fodor, (209)474-8508. [Exp. #129.]

Tri-Valley Apple Users. Meetings: 1st Wed., 7:00 pm, Glendale Federal Bank, 3101 Crow Canyon Place, San Ramon. Call: Jerry Carleton, (510)828-6237. [Exp. #129.]

ATARI

ABACUS—Atari Bay Area Computer Users Society. Meetings: 1st Sat. 12:00 noon, Potrero Branch Public Library, 2nd floor, 1616 20th St., San Francisco. DTP/MIDI/Video games SIGs. Call: Roger Sinasohn, (415)469-7924. [Exp. #129.]

Northern California Atari Computer Enthusiasts. Meetings: 3rd Tues., 7:30 pm, Pac Bell Bldg., 3260 Sebastopol Rd., Santa Rosa. Call: Kim Remick, (707)795-8173. [Exp. #126.]

San Leandro Computer Club. Meetings: 1st Tues., 8:00 pm, San Leandro Main Library, Estudillo Room, 300 Estudillo Ave. 8/16/32-bit, SIGs. Call: Robbie, (510)797-5636. [Exp. #131.]

AT&T

AT&T Computer Users Group. Meetings: 1st Wed., 7:00 pm, 50 Fremont St., 40th Floor—near 1st and Mission, San Francisco. Call: Jim Lansing, (415)885-6631 or Joe Mahoney, (415)584-6510. [Exp. #129.]

CAD

Sonoma County AutoCAD Users Group. Meetings: 3rd Tues., 6:30 pm. Call: John Weitzel, (707)525-8147. [Exp. #130.]

Southbay AutoCAD User Group. Meetings: Last Thurs. on even months, 6:00 pm. Food, prizes, and more. Call: Dean Villegas, (408)282-4448. [Exp. #126.]

COMMODORE

C=HUG (Commodore Hayward User Group). Meetings: 2nd Sat., 2:00 pm, Palma Ceia Park. (510)531-3734. [Exp. #131.]

CWEST Commodore 64/128. Meetings: 2nd. Wed., 6:30–8:45 pm, Excelsior Library, 4400 Mission, San Francisco. San Francisco. Call: (415)626-9946. [Exp. #126.]

DEC

BayLUG. Digital Equipment Computer User's Society Local User Group. For users of DEC and other hardware. Call: Rich Taylor, (408)776-4978. [Exp. #127.]

DESKTOP PUBLISHING

BMUG Desktop Publishing And Design SIG. Meetings: 3rd. Tues., San Francisco. Call: Les Cowan, (415)641-6033. [Exp. #129.]

ELECTRONIC PHOTO-IMAGING

EPUG—Electronic Photo-Imaging User's Group. Meetings: 3rd Friday, 7:00 pm, Ewert's Photo-Scientific, 2090 Duane Ave., Santa Clara. Call: Rik Franz or Jerry Chapman, (408)727-3686. [Exp. #128.]

IBM AND COMPATIBLES

BAYTALK. Meetings: 3rd Tues., 6:00 pm, Sun Peking Restaurant, 2068 Center St., Berkeley. For low-vision and other disabled persons; learn about adaptive technology and develop computer skills. Call: (415)777-4777. [Exp. #131.]

EastBay FOG. Meetings: 2nd Wed., 7:30 pm, Episcopal Church of St. John-in-Montclair, 1707 Gouldin Rd., Montclair. All microcomputers, MS-DOS, CP/M. Call: (510)653-2627. [Exp. #130.]

F.U.N. PC Users Group. Meetings: 2nd Tues., 6:00 pm, SyQuest Technology, 47071 Bayside Pkwy. (corner Gateway Blvd.), Fremont. Visitors welcome, no experience necessary. Call: (510)795-4286 #8. [Exp. #129.]

Golden Gate Computer Society. Meetings: 4th Mon., 7:00 pm, San Rafael Community Center, 618 B St., San Rafael. Free intro to computers class at 6:00 pm. Call: (415)454-5556. [Exp. #129.]

Napa Valley PC Users Group. Meetings: 2nd Wed., 7:30 pm, Napa High School Lecture Hall, 2475 Jefferson St., Napa. Call: Lee Schwab, (707)257-2675. [Exp. #130.]

NaSPA Bay Area Chapter. Meetings: Last Tues. of odd-numbered months, 3131 Zanker (near First and Montague), San Jose. Technical aspects of corporate computing with emphasis on IBM and compatible mainframes. Call: Radi Shourbaji, (408)526-3258. [Exp. #131.]

OS/2 BAUG Enterprise Computing SIG. Meetings: 3rd Mon., 7:00 pm, IBM, 425 Market St., 22nd floor, San Francisco. Call: Larry Baptist, (510)675-2466. [Exp. #129.]

San Francisco Business Computers. Meetings: 4th Tues., 5:30 pm. 110 Pacific #153, San Francisco. For those who use computers in business. Visitors $5. Call: Jordan Rosenberg, (415)788-5338. MCI Mail: 425-1545. [Exp. #130.]

San Francisco Computer Society. Meetings: 4th Mon., 7:00 pm, Presbyterian Church, 1329 7th Ave., San Francisco. CPM and DOS. Call: Bob Forsberg, (415)885-6202. [Exp. #130.]

San Francisco PC Users Group. Meetings: 3rd Tues., 6:15 pm SIGs, 7:30 pm General Meeting. St. Mary's Conference Center, 1111 Gough St., San Francisco. Call: (415)346-2644, events; Kendall Callas, (415)821-1310; Loyd Cribs, (415)751-5219. [Exp. #131.]

SEF Business Operations SIG. Meetings: 1st Tues. every other month, 7:00 pm, Center for Software Development, 111 W. St. John St., Ste. 200, San Jose. A special interest group of the Software Entrepreneurs' Forum. Call: Mike Schmit, (408)244-6826. [Exp. #131.]

SEF International Software SIG. Meetings: 3rd Mon., 7:00 pm, Center for Software Development, 111 W. St. John St., Ste. 200, San Jose. A special interest group of the Software Entrepreneurs' Forum. Call: Charlie Pfefferkorn, (408)923-7570. [Exp. #131.]

South Bay WordPerfect User Group. Meetings: 4th Tues. (no Dec. meeting), Saratoga Community Library, Fruitvale and Saratoga Ave., Saratoga. Free. Call: Scott Maiden, (408)253-4591. [Exp. #131.]

Stanford Palo Alto Area PC User Group. Meetings: Last Wed., 7:30 pm, Varian Auditorium, 3075 Hansen Way (off Page Mil Road), Palo Alto. Call: (415)329-8252. [Exp. #131.]

LEGAL

SF Bar Assoc. WordPerfect User Group. Meetings: 3rd Wed., odd-numbered months, noon, SF Bar Assoc. Boardroom, 7th Fl., 685 Market St. Brown bag meetings. Call: (415)421-5650. [Exp. #128.]

MACINTOSH

AHUG—Apple HyperCard User Group. Meetings: 3rd Thurs., Apple Computer, Bldg. 4, 4 Infinite Loop Way, Cupertino. Meetings include speakers and topics for beginners and experienced HyperCard and AppleScript users. Call: (408)974-1707. [Exp. #126.]

Association Of A32 Users. Meetings: 2nd Sat., 10:00 am, Sunnyvale Community Center Arboretum, 550 E. Remington Ave. (near corner of El Camino and Fair Oaks). Q&A session; guest speakers and vendor demonstrations; shareware, freeware, and PD software disks. Call: (408)263-0398. [Exp. #130.]

Diablo Valley Macintosh User Group (DVMUG). Meetings: 3rd Tues., 7:00 pm, Bancroft School, 2200 Parish Dr., Walnut Creek. Get together with Mac and Performa users. Enjoyable SIG meetings. Call: (510)827-5775. [Exp. #128.]

International Macintosh Users Group (IMUG). Meetings: 3rd Thurs., 7:00 pm. A forum for multilingual/multiscript computing. Call: Roger Sherman, (415)859-5146. [Exp. #130.]

PAUG—Peninsula Apple User Group. Meetings: 3rd Thurs., 7:00 pm, Ampex Cafeteria, 411 Broadway, Redwood City. Beginners and advanced, Q&A, new product demos, public domain software. Call: Kent Fillmore, (415)571-1433. [Exp. #131.]

SEF Macintosh SIG. Meetings: 3rd Tues., 7:00 pm (next meeting Sept. 20), Apple R&D Bldg. 4 Town Hall Auditorium, 4 Infinite Loop, Cupertino. Sponsored by Software Entrepreneurs' Forum. Call: Jeff Cherniss, (408)358-5150. [Exp. #131.]

Sequoia Macintosh Users' Group—SMUG. Meetings: 2nd week, 7:00 pm, Founders Hall, Rm. 118, Humbolt State University, Arcata. Call: (707)442-3520. [Exp. #127.]

SPC Apple User Group. Meetings: 2nd Tues., 7:30 pm, Fremont Main Public Library. The Society for Prevention of Cruelty to Apple Computers Users Group supports all Apple and Macintosh computers. Call:

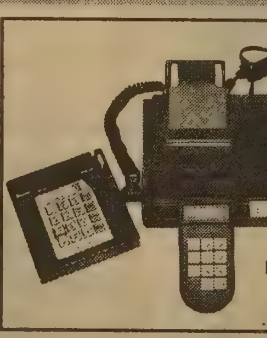
INCREASE YOUR CASH FLOW BY ACCEPTING CREDIT CARDS

MAKE IT CONVENIENT AND DESIRABLE FOR YOUR CUSTOMERS TO BUY FROM YOU...

-Use fast state-of-the-art equipment-

ACCEPT
- VISA, MC, AMEX
- ATM DEBT CARDS
- RISK FREE CHECK
- PAY LOW RATES!

WE ACCEPT ALL TYPES OF ACCOUNTS!



Highest approval rate in the industry.

NEW BUSINESSES-OK! • HOME OFFICE-OK!

CALL DAN ANDERSON
1-800-327-2094
BBS: (415) 327-2094

CARDSERVICE INTERNATIONAL
THE NORTHWEST OFFICE
A REGISTERED AGENT OF: TEHAMA COUNTY BANK, RED BLUFF, CA. HUMBOLT BANK, EUREKA, CA. REDDING BANK OF COMMERCE, REDDING CA.

Seybold San Francisco.
It promises to be a real eye-opener.

Come to Seybold San Francisco this September and you'll see some amazing things. Like the hottest new computer graphics and publishing solutions. The very latest in color and output technologies. Even multimedia, workflow, and presentation breakthroughs. All displayed by over 350 premier exhibitors.

Seybold also offers an unparalleled 3-day conference program, more than 65 in-depth sessions, 24 specialized courses, and a 2-day Quark symposium. Taught by industry experts, each course is designed to help you better use all these eye-popping technologies.

If you have anything to do with computer publishing, graphics, or communications, do not miss this event. It has everything you need to work faster and perform better. But don't take our word for it. Come stare for yourself.

SAVE $50—MAIL THIS FOR A FREE EXPO PASS! EXPO IS 9/14-16

Name____________________
Company____________________
Address____________________
City, State, Zip____________________
Phone/Fax____________________
24 Send to: Seybold SF, P.O. Box 5856, San Mateo, CA 94402-0856

Or Fax to: 415-525-0199

Conference is September 13-16 • Moscone Center • Call 800-488-2883 for information

SEYBOLD SAN FRANCISCO
Conference & Exposition

esented by Seybold Seminars

994 Ziff-Davis Exposition and Conference Company, L.L.C. No one under 16 admitted.

USM

US MACH

US MACH Systems
USM Distributors

Incorporated 1983

Price and availability subject to change.
No surcharge for credit cards.
Not responsible for typographical errors.

Visit our stores
In **SO. CALIFORNIA:**
USM BREA
(714) 255-0113
USM IRVINE
(714) 252-8335

American Megatrends

FACTORY AUTHORIZED DISTRIBUTOR

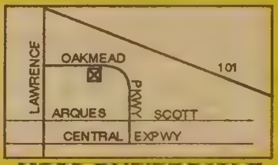
American Megatrends

SAN MATEO AVE.
AIRPORT BLVD.
380
GRAND AVE.
101
So. AIRPORT

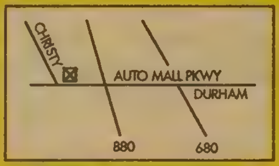
USM SAN FRANCISCO
61A Airport Blvd., So. San Francisco, CA 94080
415-952-5885 FAX: 415-952-5855
HOURS: M-F 9-6 • Sat 10-5

STANFORD
EL CAMINO REAL
COWPER
TASSO
WEBSTER
101
UNIVERSITY
FREE PARKING

USM PALO ALTO
540 University Ave.Palo Alto, CA 94301
415-325-0651 FAX: 415-325-2459
HOURS: M-F 10-7 • Sat 10-5



USM SUNNYVALE
1290 Oakmead Parkway, Sunnyvale, CA 94086
408-738-8291 FAX: 408-738-8298
HOURS: Mon-Fri 9-6



USM FREMONT
43104 Christy Street Fremont, CA 94538
510-623-9040 FAX: 510-623-7592
HOURS: M-F 9-6 • Sat 10-5

USM SANTA CLARA may be moving, please call after Aug. 31st.
408-980-0602 FAX: 408-980-0604
HOURS: M-F 9-6 • Sat 10-5

Atlas Pentium 90MHz - CALL

American Megatrends

STATE OF THE ART TECHNOLOGY

The World Leader in AMI BIOS & Hardware Design

FREE AMIDIAG Diagnostic software/ manuals w/ every AMI System PC Magazine Editor's Choice

MS DOS 6.2 & MS Ergonomic Mouse included

FREE 1 year On-site Service support for Corporate volume buyers

American Megatrends

EXCALIBUR PENTIUM

Excalibur Pentium 60MHz

- Intel Pentium CPU
- Built in IDE I/O 2S/1P
- 256k Static RAM Cache

- 4MB RAM exp. to 128/192MB
- TEAC 1.2MB & 1.44MB FD
- Key Tronic 101 keyboard
- Mid tower case w/230W PS
- Microsoft Ergonomic Mouse
- MS DOS 6.2
- CPU Cooling Fan • Full burn-in
- 1 year parts & labor warranty

$1795 Excalibur - VLB

$1895 Excalibur PCI/ISA

$1995 Excalibur - PCI/EISA

American Megatrends

Enterprise IV 486DX2-66MHz EISA-VESA w/256k cache

- Enterprise IV Motherboard
  - Intel CPU 486DX2-66
  - Pentium P24T Support-ZIF socket
  - Built in IDE I/O 2S/1P
  - 256K Static RAM cache
- 4MB RAM exp. to 256MB
- TEAC 1.2MB & 1.44MB FD
- Key Tronic 101 keyboard
- Mid tower case w/230W PS
- Microsoft Ergonomic Mouse
- MS DOS 6.2
- CPU Cooling Fan • Full burn-in
- 1 year parts & labor warranty

$1295 Enterprise IV - 66

American Megatrends

SuperVoyager II/III 486DX2-66MHz VESA Local Bus - 256k cache

- SuperVoyager II Motherboard - 256K Static RAM Cache
  - Intel CPU 486DX2-66
  - Pentium P24T Support-ZIF socket
  - Built in IDE I/O 2S/1P
- 4MB RAM exp. to 64MB
- TEAC 1.2MB & 1.44MB FD
- Key Tronic 101 keyboard
- Mid tower case w/230W PS
- Microsoft Ergonomic Mouse
- MS DOS 6.2
- CPU Cooling Fan • Full burn-in
- 1 year parts & labor warranty

$1195 SuperVoyager II/III 66

SPECIALS

FastDisk NC EISA/SCSI	**$245**
FastDisk EISA/VLB Ca.	**385**
FastLAN SCSI	**395**
FastView VLB 2MB	**345**
AMI Pentium MB	**In Stock**

American Megatrends, Inc.

Motherboard Benchmark Summary

Product	MHz	Cache	Landmark CPU V. 2.0	Pwr Mtr MIPS V. 1.7	Norton SI Computer Index V.6.0	InfoWorld CPU V. 1.0
Excalibur VLB	66	512KB	385.00	47	211.3	80.5
Enterprise IV	33/66	256KB	223.55	29.5	144.5	48.7
Enterprise IV	50	256KB	167.64	22.3	108.4	37.0
Enterprise IV	40	256KB	134.13	17.3	86.6	22.4
Enterprise IV	33	256KB	111.75	14.9	72.2	24.3
SprVoy VLB II	33/66	256KB	223.53	29.1	144.5	48.4
SprVoy VLB II	50	256KB	167.64	22.1	108.4	36.8
SprVoy VLB II	40	256KB	134.2	17.8	86.6	25.9
SprVoy VLB II	33	256KB	111.76	14.8	72.2	24.3

OPTIONS:
Custom Configured Systems are US MACH's Specialty.
We guarantee the best price on all peripherals & software.
VIDEO CARDS: AMI FastView VLB, Diamond Viper, Cirrus Logic, ATI Mach 32 VLB, Hercules Graphite and more
MONITORS: NEC, NANAO, MAG, Sony, Viewsonic
HARD DISKS: Maxtor, Conner, Fujitsu, Toshiba, WD
CONTROLLERS: AMI FastDisk, Ultrastor 34F, Adaptec, Promise
Please Call or Fax Your Configuration for the BEST System at the BEST Price!

**BEST VALUE!
2 Year MB &
Lifetime Labor
Warranty**

mach

V Energy Star 486VL
VII 486PCI
VIII Pentium VLB/PCI

mach V Energy Star

- mach V 486-66 VLB Superboard
- 3 VESA Local Bus Slots. 8 ISA Slots
- SuperFast VLB IDE I/O
- 4MB RAM exp. to 32MB
- 256k Static RAM Cache
- TEAC 1.2MB & 1.44MB FD
- Key Tronic 101 Keyboard
- Mid Tower Case w/235W PS
- CPU Cooling Fan
- Microsoft Ergonomic Mouse
- MS DOS 6.2 • Full Burn in
- 2 Year Motherboard Warranty
- I Year Parts Warranty
- Lifetime Labor Warranty

The Corporate Choice

$995
486DX2-66

mach VI DX4-100MHz **$1495**

mach VII PCI 486

- mach VII PCI 486-66
- 4 PCI Slots / 5 ISA Slots
- PCI IDE I/O
- 4MB RAM exp. to 128MB
- 256k Static RAM Cache
- TEAC 1.2MB & 1.44MB FD
- Key Tronic 101 Keyboard
- Mid Tower Case w/235W PS
- CPU Cooling Fan
- Microsoft Ergonomic Mouse
- MS DOS 6.2 • Full Burn in
- 2 Year Motherboard Warranty
- I Year Parts Warranty
- Lifetime Labor Warranty

$1195
486DX2-66

mach VIII PCI/VLB Pentium

- mach VIII Pentium PCI/VLB 60MHz Motherboard
- 4 PCI Slots / 5 ISA Slots
- PCI IDE I/O
- 4MB RAM exp. to 192MB
- 256k Static RAM Cache exp. to 512k
- TEAC 1.2MB & 1.44MB FD
- Key Tronic 101 Keyboard
- Mid Tower Case w/235W PS
- CPU Cooling Fan
- Microsoft Ergonomic Mouse
- MS DOS 6.2 • Full Burn in
- 2 Year Motherboard Warranty
- I Year Parts Warranty
- Lifetime Labor Warranty

$1695
Pentium VLB-60MHz

1795
Pentium PCI-60MHz

Now Available

Pentium-90MHz

Custom Configurations

Call for Best Prices!

Hard Drive Specials

CONNER	210MB IDE	$165
	420MB IDE	215
	540MB IDE	305
	810MB IDE	445
	340MB SCSI	245
	540MB SCSI	345
	1.0GB SCSI	635
MAXTOR	345MB IDE	195
	540MB IDE	295

With AMI or Above Complete System Purchase Only • Quantities are Limited

MULTIMEDIA UPGRADE KIT SPECIALS

PHILIPS CD ROM
SoundBlaster Pro
and 5 CD Titles
$175

SONY/Mitsumi
Dbl. Spd. CD ROM
Deluxe Sound Card
and 5 CD Titles
$275

NEC CDR 510
Triple Spd. CD ROM
Pro Audio Spectrum 16
and 5 CD Titles
$575

TOSHIBA
3401B CD ROM
Pro Audio Spectrum 16
and 5 CD Titles
$475

New Products from **US Design Technologies**

EaglePort VLB/550
VLB IDE w/2 16550 serial ports $49

EagleView VLB Cache
VLB graphics card w/video caching - 1MB ... 99
2MB 149

UPGRADING YOUR SYSTEM? GO US MACH! BEST PRODUCT, PRICE, QUALITY, SERVICE!

USER GROUPS cont.

Dean Fearn, (510)881-9160. [Exp. #129.]

MARKETING

SEF Marketing SIG. Meetings: 4th Thurs., 7:00 pm, Cubberley Community Center, Rm. H-1, 4000 Middlefield Rd., Palo Alto. A special interest group of the Software Entrepreneurs' Forum. Call: Bill Ryan, (415)615-7906. [Exp. #131.]

MULTIMEDIA

Desktop Video User Group. Now forming in El Cerrito. Call: (510)528-9895. [Exp. #130.]

SEF Multimedia SIG. Meetings: 1st Thurs., 7:00 pm, Center for Software Development, 111 W. St. John St., Suite 200, Downtown San Jose. SIG of Software Entrepreneurs' Forum. Call: Ralph Gilman, (408)746-0551. [Exp. #131.]

NOVELL

Diablo Valley NetWare Users Group. Meetings: 3rd Tues., 6:00 pm, Terraces building, 2300 Contra Costa Blvd., Conference Room, Pleasant Hill. Call: Leslie or Tom, (510)825-3275. [Exp. #129.]

Silicon Valley NetWare Users Group. Meetings: 3rd Wed., 6:30 pm, Sundowner Inn, Sunnyvale. Call: (408)954-0585, x590. [Exp. #130.]

OS/2

OS/2 Bay Area User Group. Meetings: 4th Mon., 7:00 pm. For anyone interested in OS/2. Presentations, product demos, questions and answers. Call: (415)755-3124. [Exp. #129.]

OS/2 Developers SIG. Meetings: 2nd Mon., 7:00 pm, IBM, 1055 Joaquin Rd., Mountain View. Call: (510)945-7565. [Exp. #129.]

PARADOX

bapals (Bay Area Paradox User Group). Meetings: 4th Tues., 5:00 pm, McKesson Building, 1 Post St., 18th Fl., San Francisco. Call: (415)995-4688. [Exp. #131.]

PEN

SEF Pen/Mobile Computing SIG. Meetings: 4th Wed., 7:00 pm, Cubberley Community Center, Rm. H-1, 4000 Middlefield Rd., Palo Alto. A special interest group of the Software Entrepreneurs' Forum. Call: Bill McAlpine, (415)348-2257. [Exp. #131.]

PROGRAMMING LANGUAGES

Forth Interest Group, North Bay Chapter. Meetings: 2nd Sat., 1–5 pm, tutorial at noon, 2055 Center St., Berkeley. Call: Leonard Morgenstern, (510)376-5241. [Exp. #130.]

SEF Intelligent Systems SIG. Meetings: 2nd Mon., 7:00 pm, Center for Software Development, 111 W. St. John St., Ste. 200, San Jose. A special interest group of the Software Entrepreneurs' Forum. Call: Leor Jacob, (415)595-5200. [Exp. #131.]

SEF Visual BASIC SIG. Meetings: 2nd Thurs., 7:00 pm, Cubberley Community Center, 4000 Middlefield Rd., Rm. H-1, Palo Alto. Sponsored by Software Entrepreneurs' Forum. Call: Allan Colby, (415)851-4567. [Exp. #131.]

Silicon Valley Forth Interest Group. Meetings: 4th Sat., 10:00 am–5:00 pm, 230 Lincoln Centre Dr., Foster City. Call: Dr. C.H. Ting, (415)638-5669 (w), 571-7639 (h). [Exp. #131.]

PROJECT MANAGEMENT

Microsoft Project Users Group. Meetings: 3rd Tues., alternates between San Jose and Foster City. Q&A, speakers, product demos, and other topics related to Microsoft Project and project management. Call: Jim Spiller, (707)425-2484. [Exp. #131.]

TEXAS INSTRUMENTS

TI-99/4A. Meetings: 2nd Sat., Oakland. Call: Fred, (510)530-8335. [Exp. #128.]

UNIX

AT&T UNIX Computer Users Group. Meetings: 4th Wed., 6:30 pm, Location varies. Call: Thad Floyran, (408)985-7100 or Usenet: thad@cup.portal.com [Exp. #129.]

International Linux Association. Meetings: 3rd Mon., 7:00 pm, International House of Pancakes, 5403 Stevens Creek Blvd. (off I-280 Lawrence Expwy. South, next to Howard Johnson Hotel), Santa Clara. Learn/use UNIX, X-Windows, Internet through Linux. See Linux change the computing world. Call: (408)369-9818, email alte@rahul.net . [Exp. #130.]

SEF UniForum Open Systems SIG. Meetings: 2nd Tues., 7:00 pm, DEC Auditorium, 130 Lytton Ave., Palo Alto. A special interest group of the Software Entrepreneurs' Forum. Call: Priscilla Rowe, (415)546-4950. [Exp. #131.]

VIDEO TOASTER

Bay Area Video Toaster Users Group. Meetings: 4th Tues., 7:00 pm, Richmond Public Library, Whittlesey Room, 325 Civic Center Plaza, Richmond. Product demos, guests, info, tips, and much more. Call: Don Smith, (510)620-6759. [Exp. #131.]

Silicon Valley Video Toaster Users Group. Meetings: Last Thurs., 7:00 pm, HT Electronics, 275 N. Mathilda Ave., Sunnyvale. Special guests, equipment demos, hands-on workshops, info/tips on Toaster 4000 and System 3.1. Call: Andrew Timmins, (408)243-9233 (eve.). [Exp. #131.]

WINDOWS

SEF Windows SIG. Meetings: 1st Wed., 6:30 pm, Cubberley Community Center, Room H-1, 4000 Middlefield Rd., Palo Alto. SIG of the Software Entrepreneurs' Forum. $10 for nonmembers. Call: Fran Finnegan, (415)288-4400. [Exp. #131.]

WIRELESS

SEF Wireless SIG. Meetings: 1st Mon., 7:00 pm, Center for Software Development, 111 W. St. John St., Ste. 200, San Jose. A special interest group of the Software Entrepreneurs' Forum. Call: Patrick Glenn, (408)448-3844. [Exp. #131.]

GARLIQUE GRAPHICS
WORLD FAMOUS GIF'S
ADULT CD'S
FREE CATALOGS
SUBSCRIBE ON-LINE
AMEX
408-847-0665

Nitelog BBS
26 Nodes
50,000 Files
Fidonet / Internet Email
Usenet / Rime / ILink Email
DOS / WINDOWS / NT
OS2 / UNIX / MAC
& ADULT FILES
(408) 655-1096
28.8k Lines Available too!
VISA

ASSOCIATIONS

American Association For Artificial Intelligence. Meetings: Individuals interested in learning about the use and application of AI. Call: (415)328-3123, fax: (415)321-4457, email: membership@aaai.org . [Exp. #126.]

The Assembler Multitude. Meetings: every 3rd week on Mon., 7:30 pm, University Lutheran Church, 1611 Stanford Ave., Palo Alto. An open discussion of new technical developments in many fields and how they relate to nanotechnology. Call: (408)974-6241. [Exp. #131.]

The Association For Customer Support Professionals (ACSP). Meetings: Quarterly. Dedicated to the development and furtherance of customer support as a distinct profession, to the growth of the support community, and to the improvement of support service. Call: (510)865-4515. Email: tao@well.sf.ca.us or 71333,2116@Compuserve.com . [Exp. #126.]

Association For Women In Computing. Meetings: 1st Wed., 6:00 pm, Sinbad's Restaurant, Pier 2, San Francisco Embarcadero. $15 members, $20 guests. Call: (415)979-8450. [Exp. #131.]

Bay Area Video Coalition. A place for independent videomakers to communicate with each other and the larger media community. $10 for nonmembers. Call: Anne Etheridge, (415)861-3282. [Exp. #128.]

Black Data Processing Associates, Silicon Valley Chapter. Meetings: 4th Thursday, 6:30 pm, Amdahl Corp., Bldg. H, 1240 E. Arques Ave., Sunnyvale. National network of DP professionals, educators, students, and vendor reps. Call: Willie Mackey, (408)280-7624. [Exp. #128.]

Business Marketing Association. Meetings: 4th Wed., 11:30 am, Marriott Hotel on Great America Pkwy., Santa Clara. A professional organization for business-to-business marketing professionals; CBC certification, topical programs, seminars, job bank. Call: (408)365-9815. [Exp. #131.]

Center For Software Development. 111 West Saint John, Ste. 200, San Jose. A nonprofit corporation whose goal is to help software businesses grow and bring better products to market more rapidly. Call: (408)494-8378. [Exp. #131.]

Computer Professionals For Social Responsibility/Berkeley Chapter. Meetings: last Sun., 2:00 pm, BMUG Offices, 2055 Center St., Berkeley. Meetings are open to the public and free. Call: (510)987-0567 or cpsr-berkeley@cpsr.org . [Exp. #130.]

Foresight Institute. Meetings: 123 Fremont Ave., Los Altos. Information about and discussion of nanotechnology and other anticipated technologies. $35 annual membership. Call: (415)917-1122. [Exp. #130.]

Historical Computer Society. 10928 Ted Williams Pl., El Paso, TX 79934. A nostalgia group for enthusiasts of older computers and their history. Main forum is *Historically Brewed* newsletter; $18/yr., $3 sample. Call: David A. Greelish, (915)822-2683. [Exp. #127.]

Independent Computer Consultants Association, Northern California Chapter. Meetings: Dinner: 2nd Tues., 6:00 pm; Breakfast: 4th Thurs., 7:30 am; The City Club, 155 Sansome St., San Francisco. Open discussion, questions and answers. Call: (415)399-0305. [Exp. #131.]

Nanosystems Study Group. Meetings: every few months, 7:30 pm, Genentech Conference Center, Bldg. 5, South San Francisco. Call: Ted Kaehler, (408)974-6241. [Exp. #130.]

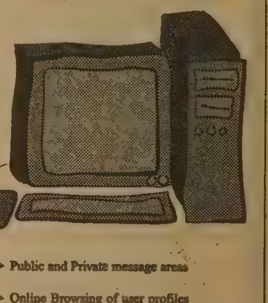
North Bay Systems Professionals. Meetings: 3rd Wed., 6:00 pm networking, 7:00 pm dinner, 8:00 pm speaker. Embassy Suites Hotel and Conference Center, 101 McInnis Parkway, San Rafael. NBSP provides a forum for systems professionals to grow and to benefit from a network of other like professionals. Call: (415)721-4409. [Exp. #130.]

Robotics Society Of America. Meetings: 1st Wed., 8:00 pm, Exploratorium Library. Call: Brad Smallridge, (415)550-0588. [Exp. #128.]

Society For Technical Communication, San Francisco Chapter. Meetings: 3rd Wed., 6:00, program at 6:45 pm, Stagecoach Restaurant, 44 Montgomery St., San Francisco. Job listings, guest speakers, technical publications competition, newsletter. Call: (415)985-7121. [Exp. #131.]

Society For Technical Communication, Silicon Valley Chapter. Meetings: 4th Thurs. 5:30 pm refreshments, 6:30 pm dinner, 7:15 dessert. Sunnyvale Hilton, 1250 Lakeside Drive (off Lawrence Expressway at 101). Guest speakers, special interest groups, networking, job listings, newsletter. Call: (408)737-9426. [Exp. #127.]

Software Entrepreneurs' Forum. 3rd Wed., 6:30 pm, Elk's Lodge, 4249 El Camino Real, Palo Alto. Industry association dedicated to software developers and entrepreneurs, offering information and education on all facets of the software industry. Call: Barbara Cass, (415)854-7219. [Exp. #131.]



finally, a good reason
to use the
computer.

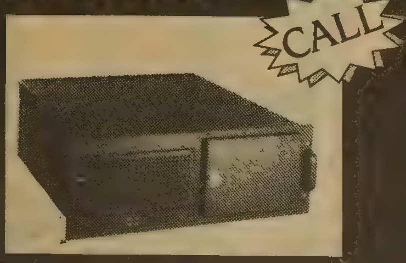
- 16 lines
- 1200 - 14.4k bps (all lines)
- Sizzling public and private live chat out there - meet people to party with!
- 7 *fast* CD-ROM drives online, both Adult and Public Domain software
- Public & private message bases for *hot* correspondence
- running TBBS software
- Public and Private message areas
- Online Browsing of user profiles
- Huge collection of non-CD files (countless adult GIF pictures)
- See classified ads from this magazine *before* they're published!
- Several reasonable membership rates
- Now available in Southern CA!

pathway bbs
get into the swing of things

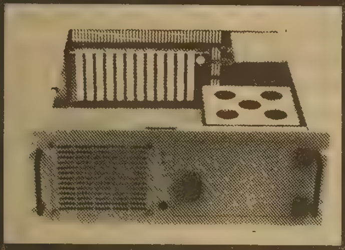
8N1 · ADULTS ONLY · Free Sample Files
Voice Info: 408.956.5650
(membership rates can be found online.)

northern california
408.956.5600
Fremont, Newark area - 510.790.3127
southern california (new!)
714.741.0900

19" RACKMOUNT ENCLOSURE



MADE IN U.S.A.



19" RACKMOUNT W/MONITOR

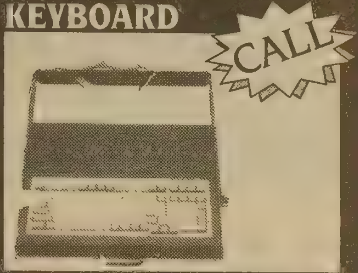
- 19" Rackmounting
- Integral Monitor
- 10" .28 dot pitch SVGA Color
- 9" Mono-TTL or VGA
- 8 or 14 Slot Passive Backplane
- 8 Slot Motherboard Mounting
- U.S.A. Manufactured

19" RACKMOUNT ENCLOSURE

- 8, 14 & 20 Slot Options
- Dual Power Supplies
- Power Supply Redundancy Option
- 8 Drive Bays
- 8 Fans
- Motherboard or Passive Backplane
- 200-1000 Watt Power Supply
- USA Manufactured

19" RACKMOUNT MONITOR KIT

19" RACKMOUNT KEYBOARD

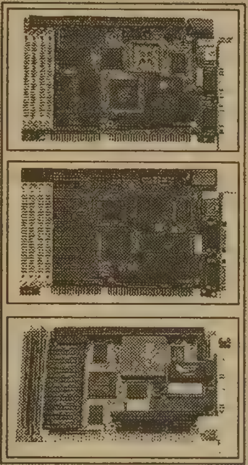


HALF-SIZE CPU CARDS

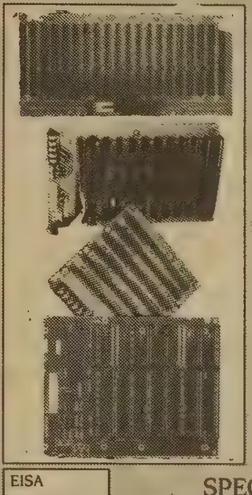
PC/AT 386SX/486SLC
1/2 Size All-In-One SBC
CPU
Cx486SLC-33 MHz or 80386SX-40 MHz
Memory
512KB-16MB DRAM
- Supports EPROM/FLASH disk, Up to 1.44 MB

PC/AT386DX
1/2 Size All-In One SBC
CPU
AMD 80386DX-40 On Board
Cache
128K Cache On Board
Memory
1-64MB DRAM
- 8 Layers With Double Sided SMT PCB

PC/AT 486DX
1/2 Size All-In-One SBC
CPU
Cyrix Cx486 or 80486SX/DX/DX2, Clock Rate from 25MHz to 66MHz
Cache
Up to 256KB
Memory
1-64MB DRAM



PASSIVE BACKPLANE BOARD

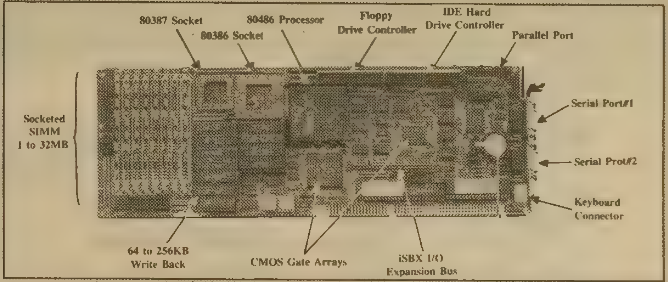


6 SLOT	$53
8 SLOT 6 AT & 2 XT	$35
8 SLOT	$59
12 SLOT	$90
14 SLOT	$94
18 SLOT	$180
20 SLOT	$194

EISA
PASSIVE
BACKPLANE
BOARD
AVAILABLE

SPECIAL OPTION
- 14 SLOT SEGMENTED 6,4,4
- 18 SLOT SEGMENTED 5,4,4,5
- 20 SLOT SEGMENTED 5,5,5,5

386 & 486 ALL-IN-ONE CPU CARD



- 4 Upgradable Models using Intel CPU's
  - -80386DX-33 MHz
  - -80486SX-33 MHz
  - -80486DX-33 MHz
  - -80486DX2-25/50 & 33/66 MHz
- 80386 & 80486 Upgradable Processor with AMI BIOS
- 256K Write Back Cache Memory
- Up to 32 MB of 70ns SIMM DRAM
- IDE Hard Disk & Floppy Disk Controller
- 2 Serial/1 Parallel Ports
- 80387 Co-Processor, 80486DX Internal Co-Processor
- Watch Dog Timer Can Be Set 500ms or 1sec, time out
- Programmable shadow RAM Capacity
- 6-Layer PCB Design To Meet Factory Floor Requirements

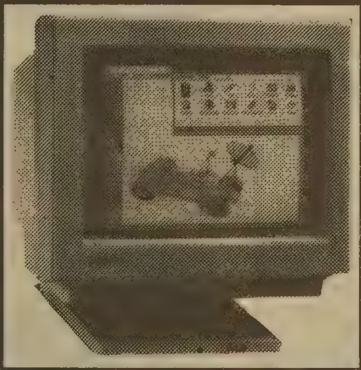
CALL FOR PRICING

EISA CPU CARD AVAILABLE

CENTRALIZED LAN SYSTEM

Features:

- FILE SERVER
- MULTI-COMMUNICATION SYSTEM
- MULTI-FUNCTIONAL SYSTEM
- 24 DIFFERENT SYSTEMS CAPABILITY RUNNING AT SAME TIME
- CAPABLE OF CUSTOMIZED SPECIFICATIONS



14" SVGA COLOR MONITOR

- CRT 14" DIAGONAL NON-GLARE FLAT
- DOT: .28mm
- RES: 1024 X 768 NON-INTERLACE, 800 X 600, 720 X 400, 640 X 480, 640 X 350
- POWER SUPPLY: 120-240V AUTO SELECTION

9" SVGA Mono Paper White

9" SVGA MONITOR MONO PAPER WHITE

- CRT: 9" x 90 DEFLECTION NON-GLARE PAPER WHITE
- RES. 1024x768, 720x400, 640x480
- POWER SUPPLY: 100-240V

HYUNDAI

1. COLOR MONITORS

Model	DESCRIPTION	PRICE
HMC-423B	14" SUPER VGA .39 Dot Pitch	$200
HCM-423E	14" SUPER VGA .28 Dot Pitch	$228
HCM-433E	14" SUPER VGA .28 Dot Pitch Non-Int	$238
17" SVGA 1280x1024	.26 Dot Pitch IBM/MAC Compatible	CALL

2. MONOCHROME MONITORS

Model	DESCRIPTION	PRICE
WEN	9" SVGA MONO PAPER WHITE	$150

*WE WELCOME RESELLERS
*FOR MORE INFORMATION PLEASE CONTACT MULTI-MICRO SYSTEMS

Multi-Micro systems

TEL: (408)-437-1555
(800)-875-0333
FAX: (408) 437-1583

Terms & Conditions
Prices subject to change without notice. Not responsible for typos or errors. Prices based on cash. Please ask about products not listed in this advertisement.
1 year warranty on parts.

2124 Zanker Road • San Jose, CA 95131 • Mon-Fri: 9am-6pm

When you see this . . . think value
If you want to reach new markets, call us!

INFORMATION HIGHWAY
(510)676-5359 MODEM

A Service of Port Chicago's Loading Dock

Call our service with your computer and modem. Or phone, or fax us, and we will send some information.

We serve individuals, businesses, professionals, clubs, associations and even folks without computers.

We are a new, free access, leading edge, shopping, information service . . . and we mean business.

If you want to reach new markets, call us. We're putting value online for your profit, enjoyment, and education.

Port Chicago's Loading Dock, Inc.
California's Online Shopping Service
P.O. Box 23438, Pleasant Hill, CA 94523
Modem: 510-676-5359
Phone: 510-932-8956
Fax: 510-937-5039

Hands-on Hardware Training

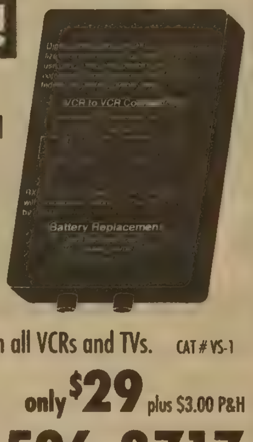
Call Now for brochure & schedule

- Classes Limited to 6 Students
- PC Clone Troubleshooting
- Intensive 2-day Hardware & LAN Classes
- Network Installations - Lantastic to Novell
- NEW! Laser Printer Maintenance
- NEW! CNE Study Group - Hardware Focus
- Call For Networking Services & Training

Highly rated classes range from $125 to $325

EXCEL MICRO SOLUTIONS
1730 Franklin St, Oakland CA
Luis Lopez, Owner

(510)-836-2040



For A Limited Time Only!

RXII VIDEO STABILIZER!

Get clear videos every time! Enjoy a clear picture with pure color and clarity on all your rented video tapes. The RXII VIDEO STABILIZER eliminates darkening and shifting of colors, unwanted lines and flashing or jagged edges caused by copyguards. State of the art integrated circuitry completely eliminates all copy protection and jamming signals. The RXII is ultra compact and fully automatic. Just pop in one 9V battery (not included) and hook it up! Compatible with all VCRs and TVs. CAT # VS-1

Black Feather ELECTRONICS

Order now!!! only $29 plus $3.00 P&H

1-800-526-3717

645 Temple 7€ • Long Beach, CA 90814 • (310) 434-5641 • FAX (310) 434-9142

Resources

BULLETIN BOARDS cont.

Gold Diggers BBS. (510)568-7807,,,23,23 (must include ,,,23,23 to get BBS). 24 hrs., 2400–14,400. IBM, Atari ST, Amiga, Mac; files, door games, and messages. Donation $10 per year. Sysop: Harry Goldberg. [Exp. #127.]

Infinite Beginnings BBS. (510)785-7018. 8-N-1, 24 hrs., 14,400. 5000+ files, 50+ online games, 50+ msg. conferences. Free. [Exp. #128.]

Initiative BBS. (510)654-2253. 8-N-1, 24 hrs., 300–14,400. Political board, documents/discussions on future of socialism in the world. Sysop: Steve Willett. [Exp. #127.]

Last Chance BBS. (510)796-1378. Apple-based files, msgs., and games. [Exp. #128.]

LightWaved 3D BBS. (510)235-4707. 24 hrs., 2400–14,400. All Amiga 3D, objects, textures, tips, and tricks. [Exp. #128.]

The Lost Worlds BBS. (510)888-1714. 24 hrs., 14,400. Hottest adult, shareware, chat, games, Internet, Usenet, Fido, msgs. [Exp. #127.]

LZ Nightline BBS. (510)834-0837. Nationwide veterans msg. conference echoes, vet info and support, non-vets welcome. Limited free access. Sysop: Jon Mankowski. [Exp. #127.]

Maddog BBS. (510)483-0203. 24 hrs., 2400–14,400. Running 10 CD-ROMs, online games, FidoNet, HotNet, sports echos, fun, tons of files. Sysop: Troy Earp. [Exp. #128.]

Maximum Capacity. (510)886-9512. 8-N-1, 14,400. Files for download, file retrieval service, messages. [Exp. #128.]

M.O.P.H. BBS. (510)834-5517. Veterans service organization listings and community events. Free. Sysop: Mike Dornner. [Exp. #127.]

Otoko Empire BBS. (510)370-6253. 24 hrs., 1200/2400. Specializing in gay topics, travel, international pen pals, Male GIFs. Sysop: Hiroshi. [Exp. #126.]

The Phantom Zone BBS. (510)538-9586. 8-N-1, 24 hrs., 300–14,400. Three lines. Online games, echomail, offline mail reader, multinode, friendly sysop. [Exp. #128.]

Planet Mirth. (510)786-6560. 14,400. Sinfully silly, Internet news, NIRVANAnet. [Exp. #126.]

realitycheck. (510)527-1662. 14,400. Instant access, coffee, cigars, tech, and text. NIRVANAnet. [Exp. #126.]

Smorgasbord BBS. (510)440-1125. 2400–28,800. Four lines. Fremont, Sunnyvale, Milpitas. 75,000 files, Internet. Free prize draw. [Exp. #128.]

StarPort Valhalla. (510)522-3583. 8-N-1, 24 hrs., 1200–14,400. Nine networks, online games, five CDs/1GB HD for downloading, adult, sci-fi. Free. [Exp. #128.]

Tiger Team Buddhist Information Network. (510)268-0102. 24 hrs., 14,400. "America's Buddhist online service." Internet email, Usenet, gigabytes of files, online shopping. Sysops: Gary Ray & Jeff Macko. [Exp. #127.]

VA Listings. (510)637-1261. 24 hrs., 300–9600. Multiline. VA-owned homes for sale. Sysop: David Piersall. [Exp. #127.]

Windows Online. (510)736-8343. Largest Windows BBS, members receive free Internet mail, thousands of files. Free limited trial. [Exp. #126.]

Wishing Well BBS. (510)745-7901. 1200/14,400. 85+ online games, quality files, ANSI art, RIP graphics, matchmaker, and more. Sysop: MaryLou White [Exp. #128.]

707

Games People Play BBS. (707)746-6873. 2400–14,400. Games, Windows, and doors. Immediate access to files. Free. [Exp. #127.]

The Party Line BBS. (707)588-8055. 2400–14,400. 12 lines. Internet email, Usenet, RIP graphics, nightly chat link. Free trial. Sysop: Jami Chism. [Exp. #128.]

Threat Management Institute BBS. (707)935-1713. 8-N-1, 24 hrs., 1200–14,400. Personal defense, firearms, firearms law, schedule of TMI classes and events. Free. Sysop: Paul Theodoropoulos. [Exp. #128.]

The WINd Tunnel BBS. (707)421-0380. 24 hrs., 2400–14,400. Great source for Windows programs, large collection of DOOM files. Free and fee. Sysop: John Wright. [Exp. #127.]

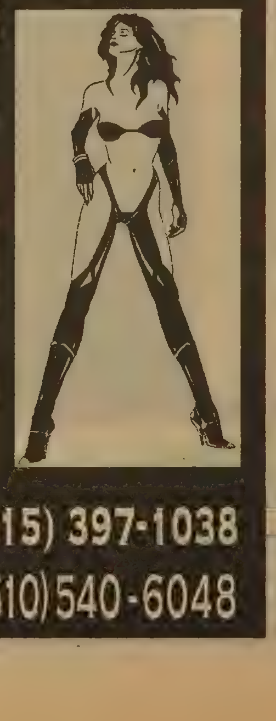
714

CWI-BBS. (714)870-1033. Entire CWI Disk Catalog plus six CD-ROMs. Free 30-min. browse. [Exp. #126.]

916

24th Street Exchange. (916)448-2483. 8-N-1, 24 hrs., up to 28,800. 38 lines, 21 CDs, FidoNet, USA Today, PC catalog, Internet email, chat. [Exp. #128.]

Pacific Exchange (Major) BBS. (916)965-0301. 8-N-1, 24 hrs., 2400–14,400. Eight lines. 35,000 files, 5GB, adult files, look for the Free stuff. $25/year. Sysop: Richard Dubois. [Exp. #128.]



GRAVEYARD SHIFT
ALL ADULT BBS
'as HOT as it gets'

Great GIFS
Animations
local scene
ThrobNet
SwingNet
RIP graphics

HOME OF S.F. STRIPPERS & SLUTS™
NEW MODELS EACH MONTH

(415) 397-1038
(510)540-6048

tell them you saw it in
MICROTIMES

WIT...THE LAST WORD IN HIGH PERFORMANCE!

WIT HIGH PERFORMANCE NOTEBOOKS

NEW ARRIVAL–SOUND BOOKS

	Mono	Dual Scan
• 486SX-25	$1400	$2000
• 486DX-33	$1560	$2160
• 486DX2-66	$1680	$2280
• 486DX4-75	$1950	$2550
• 486DX4-100	$2100	$2700

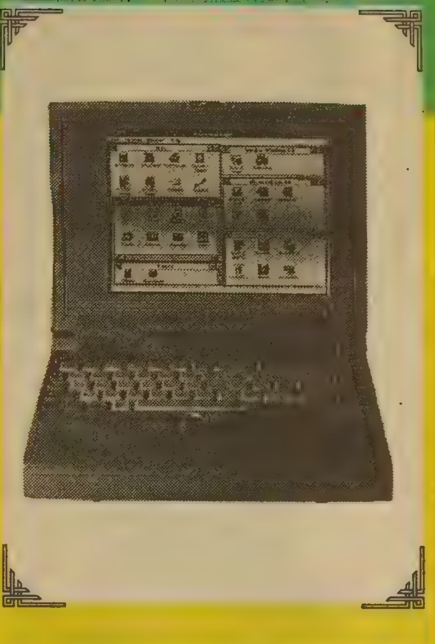
Includes:
Mono, Dual Scan Color (TFT Active Color Available), 4 MB RAM, 120 MB HDD, 1 MB SVGA VLB Card, NiMH Battery, AC Adapter, PCMCIA Type III Slot, Integrated Record/Play Audio, Carrying Case

486-SL50 MONO w/4 MB/120 MB	$1150
486-SL50 COLOR w/4 MB/120 MB	$1500
486-SX25 PCMCIA Type II SUBNOTEBOOK	$1220
486-SX25 PCMCIA Type III VGA MONO w/4MB/120MB	$1220
486-DX33 PCMCIA Type III VGA MONO w/4MB/120MB	$1360
486-DXII66 PCMCIA Type III VGA MONO w/4MB/120MB	$1400

Upgrades:

200 MB HDD	Add $100
340 MB HDD	Add $220
520 MB HDD	Add $420
Dual Scan Color	Add $600
TFT Active Color	Add $1500
PCMCIA 14400 Fax Modem	$185

4MB RAM ...Add $180 8MB RAM ...Add $360 16MB RAM ...Add $900



WIT HIGH PERFORMANCE SYSTEMS

PENTIUM-90 MHz w/256K CACHE	$1750
PENTIUM-66/60 MHZ W/256K CACHE	$1550/1450
PCI 486-66/33 MHz W/256K CACHE	$1130/1120
WIT 486DX4-100/75 MHZ W/256K CACHE	$1420/1260
WIT 486DX2-66/40 MHZ W/256K CACHE	$1010/930
WIT 486DX-50/33 MHZ W/256K CACHE	$1050/1000
WIT 486SX-33/SX-25 MHZ W/256K CACHE	$890/880
WIT 386DX-40/SX-40	$830/815
IBM 486SLC2-66/99 MHZ W/64K CACHE	$920/CALL
IBM 486SLC2-50/75 MHZ W/64K CACHE	$870/1025

The Perfect Combination...Cutting Edge Technology and Affordability! These Great Systems Include:

- ✚ 4 MB RAM
- ✚ 1.2MB & 1.44 MB Floppy Drives
- ✚ 210 MB Hard Drive
- ✚ IDE FDD/HDD Controller
- ✚ 2 Serial/1 Parallel/1 Game Port
- ✚ Mini-Tower Case w/230W Power Supply
- ✚ 101-K Keyboard
- ✚ Windows Accelerator SVGA w/1 MB
- ✚ 14" SVGA .28 dp Monitor
- ✚ 72 Hour Burn-In & Fully Tested (For VESA Local Bus With 32-Bit VLB & 32-Bit VLB SVGA Add $35 For PCI 586 w/PCI IDE & PCI Diamond Viper Add $320)

MULTIMEDIA PRODUCTS

Sound Blaster 16-Bit	$85
Speakers Pair	20
Multi-Media Kit w/Titles	300
Sony/Mitsumi CD-ROM DblSpeed	145
Toshiba CD-ROM 3401-B	285

DRIVES

210MB/250MB	$170/190
270 MB/340 MB IDE HDD	200/205
420 MB/540 MB IDE HDD	220/285
Teac 1.2/Epson 1.2 FDD	45
Teac 1.44/Epson 1.44 FDD	38
Colorado 250 MB Tape Back-Up	170
Tape Cartridges	23

CONTROLLERS

ISA IDE 2FD/2HD w/2S/1P/1G	$15
VESA IDE 2FD/2HD w/2S/1P/1G	25
Vitex AT I/O (2S/1P/1G)	12
Promise ISA IDE Cache Controller	100
Promise VESA IDE Cache Controller	150
Adaptec 1542C SCSI Controller	190
Adaptec 1542F w/Kit SCSI II Controller	235
Adaptec 2842VLK VESA SCSI Controller	275
Adaptec 2742TK EISA SCSI Controller	350

MODEM & FAXES

On-Line 2400 Modem	$30
On-Line Fax Modem 14400 Fax/14400 Modem	80
On-Line Pocket Fax Modem 14400 Fax/14400 Modem	150
On-Line 28800 Fax Modem 28800 Fax/28800 Modem	185

MONITORS

Eye-Q 14" Amber	$85
Eye-Q 14" VGA Mono	105
14" SVGA 1024x768 .39	195
14" SVGA 1024x768 .28	205
14" SVGA 1024x768 .28 NI	215
ViewMagic 15" w/Microprocessor	335
ViewMagic 17".26 Tube w/Microprocessor Low Radiation	685
ViewSonic 6E SVGA .28 NI	285
ViewSonic 15 1280x1024 .28 NI	445
ViewSonic 17G 1280x1024 .28 NI	780
ViewSonic 20 1600x1280 .28 NI	1495
ViewSonic 21 1600x1280 .29 NI	1725

VIDEO CARDS

Monographic Card	$15
VGA w/256K	30
SVGA w/1 MB ISA	55
Cirrus Logic SVGA VLB w/1 MB	80
Diamond Stealth 24 VLB w/1 MB	145
Diamond Stealth Pro VLB w/2 MB	315
Diamond Viper VLB w/2 MB	335
Diamond Viper PCI w/2MB	355

Prices Subject To Change w/o Notice.

MISC

IBM 486-SLC II 99 VLB MB	$CALL
IBM 486-SLC II 75 VLB MB	345
IBM 486-SLC II 66 VLB MB	205
IBM 486-SLC II 50 ISA MB	140
(Math Co-Processor....Add $35)	
Pentium 586 60/66 w/256K Cache Motherboard w/CPU	900/950
PCI 486 Motherboard w/o CPU	260
AT Desktop 230W Power Supply	40
AT Full Tower 250W Power Supply	45
PSII 230W Power Supply	35
XT 150W/UL Power Supply	35
Mini Tower Case w/230W PS	60
Baby Desktop Case w/230W PS	65
AT Full Desktop Case w/230W PS	85
Mid Tower Case w/230W PS	80
Full Tower Case w/250W PS	95
Power Surge Protector	6
Power Cable, IDE Cable or I/O Cable	3
1 MB RAM (each)	40
4 MB RAM (each)	150
CPU/Math Co-Processors	CALL
CPU Cooling Fan	8
3 Button Serial Mouse	8
Green PC Power Controller	CALL

CALL FOR OTHER ITEMS NOT LISTED

COMMITMENT TO SERVE YOU:

- 30 Day Money Back Guarantee For Software Incompatibility on Complete System Purchases.
- NO Restocking Charge
- 1 Year Parts & Labor Warranty
- Customized Systems
- Government P.O.'s Welcome

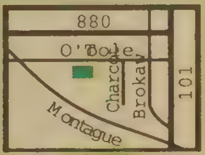
ALL AROUND SATISFACTION:

Stanford University, UC Berkeley, IBM, United Postal Service, Lockheed, General Electric, AT&T, Quantum, Conner

WIT

(408) 433-0188
Fax: (408) 433-0318
Tech Support (408) 433-0709
Wang International Trade, Inc.
2073 O'TOOLE AVE.,
SAN JOSE, CA 95131

SYSTEM UPGRADES, DIAGNOSTICS, & SERVICE AVAILABLE. CALL FOR DETAILS



HOURS:
Mon-Fri: 9-5:30
Saturday: 10-3

CENTRAL
COMPUTER SYSTEMS, INC

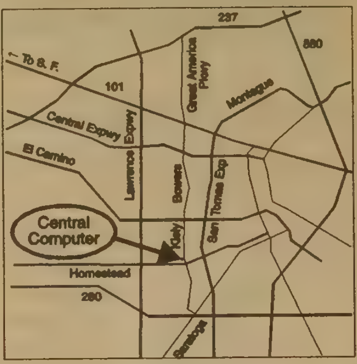
WIDE SELECTION AT LOW PRICES

Since 1986
TEL: (408) 241-0185
FAX: (408) 241-0390

820 Kiely Blvd.
Santa Clara, CA 95051
(between Homestead & Kaiser hospital)

Mon - Fri: 9 AM - 7:30 PM
Sat - Sun: 10:30 AM - 6 PM

OPEN 7 DAYS

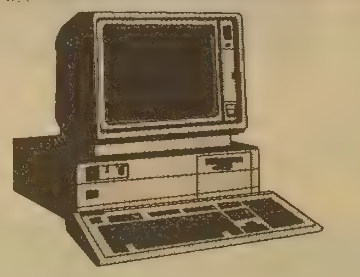


- No surcharge for Visa, MC, Discover & Amex
- Gov't, universities and qualified firms purchase orders accepted on approved credit
- Financing plan available OAC
- Reseller and quantity pricing available
- Prices are subject to change without notice and to stock on hand
- Not responsible for typographical errors
- Special order for items not listed available

Please contact, for :

- Corporate acct. sales – Josephine Co
- Japan acct. sales – Bonita Yu
- Germany, Sweden sales – Ann Lai
- Local sales – Alex, Jim, Lynn, Tom
- Tech. Support – Jim Gibson, Tim
- Customer services – Norman Yip

SYSTEMS



BASIC SYSTEM INCLUDES :

4MB RAM Memory
TEAC 1.44MB Floppy
IDE Controller
I/O 2S 1P
Baby AT Case w. 200W
MITSUMI 101 Keyboard
MS Serial Mouse
MS DOS 6.21
MS Windows 3.11

MOTHERBOARD	BASIC	BASIC + 170MB HDD	BASIC + 170MB HDD + VGA CARD + 14" SVGA Monitor
MICRONICS COMPUTERS INC.			
486-DX2-66 ISA 256K cache VLB	$964	$1123	$1437
486-33 ISA 256K cache VLB	$924	$1083	$1397
486-33 EISA 256K cache VLB	$1164	$1323	$1637
486-DX2-66 EISA 256K cache VLB	$1204	$1363	$1677
NICE made in USA			
486-DX2-66 EISA 256K cache VLB	$1044	$1203	$1517
486-DX2-66 ISA 256K cache VLB	$898	$1057	$1369
486-33 ISA 256K cache VLB	$858	$1017	$1329
486-DX2-66 Mini EISA 256K cache VLB	$954	$1113	$1427
Green Pentium Super P54VL-PCI			
586-90 Flash Bios 256K w. automatic power saver	8MB $1790	$1949	$2259
586-60 Flash Bios 256K w. automatic power saver	8MB $1430	$1589	$1899
586-66 Flash Bios 256K w. automatic power saver	8MB $1560	$1719	$2029

HARDWARE

1. CD ROM & SOUND CARD

CREATIVE LABS

CD 531 w. Kit Ext	129
Digital Edge 3X Triple Speed Kit	669
Discovery CD 16 Kit Int	319
Edutainment CD 16 Int	389
Game Blaster CD 16 Kit	369
Midi Kit + Software	65
Sound Blaster Pro Value Edition	79
Sound Blaster 16 Basic / Value Edition	95/109
Sound Blaster 16 MCD / w. ASP	139/169
Sound Blaster 16 SCSI / w. ASP	149/189
Sound Blaster AWE 32	279
Video Blaster SE	245
Video Spigot for Windows	239
Wave Blaster	189

MEDIA VISION

Fusion Double CD 16 LX Int	275
Midi Mate	49
MV2000 Family Deluxe Kit	345
MV3000 Super Deluxe Kit	385
MV4000 Premium Deluxe Kit Ext	515
MV5000 Tripple Speed Deluxe Kit	665
Pro Spectrum 16 Multimedia Kit	*(345)
Pro 16 Multimedia System II	*(395)

MITSUMI

FX-001D 250ms Doubel Speed w. Kit	139

NEC

CDR510 195ms, Triple Speed Int	345
3XI 195ms, 450Kb/s, Triple Speed Int	415
3XE 195ms, 450Kb/s, Triple Speed Ext	455
3XP Portable, Triple Speed	375
Interface Kit for PC / w. 16 bit AT SCSI	59/89

PLEXTOR

DM-3028 240ms, Int / w. 16 bit cont	259/348
DM-5028 240ms, Ext / w. 16 bit cont	359/448
PX-43CH 4 Speed Int	479
Driver Kit for Media Vision Int / Ext	19/49

TOSHIBA

3401B 200ms, 330Kb/s, Int / w. cont	259/348
3401E 200ms, 330Kb/s, Ext	339
- with original Toshiba case	369

TURTLE BEACH

Maui Synthesizer	139
Monterey Multisound	365
Tahiti Audio Digital Recording Card	255

OTHERS

CD Caddy / CD Hewel Case	3.99/1.25
Gravis Ultrasound	129
SIIG Play Computer Games On TV	149
Speakers :	
Active 75 Hi-Fi Amplier Speakers	59
Active B789 120W Speakers	69
Active SP-690 Amplied Speakers	39
Altec ACS50 / ACS150	67/105
Altec ACS300.1 Speaker System	239
Labtec CS150 Speakers	17.50

2. CASE

Baby AT w. 200W Power	59
Baby Tower w. 200W Power	59
Mid Tower w. 230W Power	75
Mid Tower w. Side Door Open, 230W Power	89
Mid Tower 2. 250W Power : Black / White	139/129
Full Tower w. 250W Power	129
Full Tower w. 300W Power : Black / Whire	199/189
Pro Line Media Baby AT 250W, built-in Speakers	125
Slim w. 130W Power (2drive bay)	75
Hard Disk Drive External Casing	
- 1 half ht or SCSI for Mac / PC, 40W, w. cables	69
- 2 half ht or 1 full ht for PC, 60W	95
- 2 half ht or 1 full ht for Mac, 60W, w. cables	115
- 3 half ht or 1 full & haalf ht for PC, 60W	109
- 3 half ht or 1 full & 1 half ht for Mac, w.cables	129

3. CONTROLLER

ADAPTEC

1515 16 bit Controller (w. cable)	89
1522A Fast SCSI w. Kit, 3Mb/s	145
1542CF SCSI Board, 10Mb/s / w. Kit	175/239
2742AT SCSI EISA w. Kit	365
2842VL SCSI VLB Board / w. Kit	235/245
2940 SCSI PCI w. Kit oem / reg	279/299
2940W Wide-SCSI PCI Kit	379
ASW-1440 ASPI Netware Manager v3.3	65
ASW-310 Sy-Tos Plus (tape backup s/w)	*(85)99
ASW-EZ SCSI 3.0 for Dos & Windows	69
T348K Parallel to SCSI Adapter	149
T358K EPP Parallel to SCSI Adpater	189

BUSLOGIC

BT445S SCSI VLB w. Kit	199
KT542B SCSI-2 w. Kit	199
KT545S Fast SCSI-2 w. Kit, 10Mb/s	209
KY747S Fast SCSI-2 EISA w. Kit	365
KT946C SCSI PCI w. Kit (supports 8GB HD)	235

COREL

Corel SCSI Software v1.2 / v2.0	69/89
Corel SCSI CD Power	69

DTC

2278VL IDE w. I/O VLB, 32 bit	35
3280AS SCSI	105

FUTURE DOMAIN (SCSI)

TMC-1660 for AT (HD only) / SVP	119/127
TMC-1680 for AT (4FD & HD), 15Mb/s	129
TMC-1680 SVP (SCSI Value Pack)	139
TMC-3260 PCI / SVP	129/165

KOUWELL

IDE only	27
IDE w. AT I/O (2S 1P 1G)	34
IDE w. AT I/O (2S 1P 1G) & 16550 chips	49
IDE w. AT I/O (2S 1P 1G) & 16550 & 2.88	59
IDE w. AT I/O (2S 1P 1G) VLB & 16550 chips	69

PROMISE (drive cache)

DC-200 IDE, cache up to 16MB	89
DC-420 IDE VLB w. 512k, cache up to 1MB	95
DC-4030VL IDE VLB, cache up to 16MB	105
DC-2040 Bios Chips & CD Driver	15

QLOGIC

Fast SCSI ISA w. Kit	125
Fast SCSI EISA w. Kit	199
Fast SCSI VLB w. Kit	189
Fast SCSI PCI w. Kit	299

ULTRASTOR

ULT15C IDE cache (w/o cable)	109

VITEX

IDE w. I/O (2S 1P) VLB	35
IDE w. 4FD/ 2S 1P/ 16550 chips	49
IDE w. 4FD/ 4S 2P 1G/ 2S16550/ VLB	89

WONDER SYSTEM (USA made)

IDE w. 4FD/ 2.88/ Drivers Tape/ 1.0 Mbps	35
IFSP2 IDE w. 4FD/ 3S 2P 1G/ 2S16550	69
SCSI w. CD Rom Drivers	45
VL2000 IDE w. AT I/O VLB	35
VL2018 IDE w. 2HD/ 4FD/ 16550/ 2.88/ VLB	69

OTHERS

ACCULOGIC IDE PCI Controller	49
BOCA IDE w. I/O (2S 1P)	49
IDE w. I/O (2S 1P)	19.50
IDE w. I/O VLB	29
SC200 SCSI-2 PCI (w. NCR chips)	99

4. CPU & MATH CO

CPU :

AMD

386 DX-40	59
486 DX2-66	269

CYRIX

486 DX-33	149

INTEL

386 DX-33 / 40	49/49
486 DX-33	249
486 DX-50	309
486 DX2-50	269
486 DX2-66	289
486 DX4-100	609
Pentium 586-60	509
Pentium 586-66	629
Pentium 586-90	759

Math Co Processor :

CYRIX

83D86 - 33	39.50
83D87 - 40	39.50
Cx486 DLC TI-33	75
Cx486 DLC TI-40	85

INTEL

387 DX (for 16 / 20 / 25 / 33 MHz)	85
387 SX (for 16 / 20 / 25 / 33 MHz)	79

OTHERS

Cooling Fan for 486 CPU	9
Cooling Fan for Pentium 586	15

*(price) .... special , while supplies last

5. DIGITIZER

KURTA

6 x 8, w. Interface	265

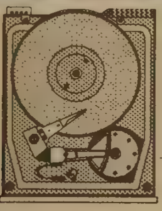
SUMMASKETCH

III 12 x 12, 4 or 16 button	269
III 12 x 18, 4 or 16 button	549

WACOM

UD-0608R 6 x 8, w. UP-201 Pressure Stylus	345
UD-1212RP 12 x 12, w. UP-201 Pres. Stylus	529

6. DRIVE



FLOPPY DRIVES :

MICRO SOLUTIONS (external)

1.2 / 1.44 (use printer port)	139

SYQUEST (removable)

88MB 3.5" w. cartridge, Int	349
88MB 5.25" w. cartridge for Mac, Ext	429
105MB 3.5" w. cart., IDE host adapter	279
105MB 3.5" w. cart., printer port for PC, Ext	389
105MB 5.25" w. cart., SCSI for Mac, Ext	389
270MB 3.5" w. cartridge, IDE, Int	499
270MB 3.5" w. cartridge, SCSI, Ext	549
270MB 3.5" w. cart., printer port for PC, Ext	549
105MB Cartridge / 270MB Cartridge	59/75

TEAC

1.2MB 5.25"	47
1.44MB 3.5" / w. frame	37/41
2.88MB 3.5" w. framw	85
Dual - 1.2MB & 1.44MB	99

HARD DRIVES :

CONNER

CFS-210A 213MB 14ms IDE 1" ht	169
CFA-340S 340MB 64k SCSI	239
CFS-420A 420MB 14ms IDE 1" ht	219
CFA-540A 540MB 12ms 256k IDE 1" ht	299
CFA-540S 540MB 12ms 256k SCSI	325
CFA-810A 810MB 12ms 256k IDE 1" ht	429
CFP-1060S 1.06GB 10ms 256k SCSI	659
CFA-1080A 1.08GB 9.5ms 256k IDE	599

FUJITSU (5 yr. warranty fr. Fujitsu)

M2694ESA 1.0GB 10ms SCSI-2 3.5" 1/2 ht	679

MAXTOR

MXT-7171A 170MB 15ms IDE 3.5"	159
MXT-7290S 290MB 14ms 64k SCSI	225
LXT-7345A 345MB 14ms 64k IDE 3.5"	205
MXT-7345S 345MB 15ms SCSI 1" ht	239
MXT-7546 546MB 12ms 256k IDE	299
Optical Rewritable 1.3GB 19ms SCSI, 4MB Ext	
Tahiti III w. Adaptec 1542 & Plaster Cartridge	2545
1GB Glass Cartridge	165
1GB Plastic Cartridge	135

MICROPOLIS

MC-4110A 1.0GB 8.5ms 512k IDE 1/2 ht	685
MC-4110 1.0GB 8.5ms 512k SCSI-2 1" ht	685
MC-2217A 1.75GB 10ms 512k IDE 1/2 ht	955
MC-2217 1.75GB 10ms 512k SCSI-2 1/2 ht	955
MC-2217AV 1.75GB Audio Visual	1085
MC-2217DW 1.75GB Fast Wide-SCSI	1285
MC-1926 2.1GB 13ms 512k SCSI-2 full ht	1345
MC-1936 3.0GB 11ms 256k SCSI full ht	1975
MC-1936AV 3.0GB Audio Visual	2275

QUANTUM

LPS-270AT 270MB 12ms 128k IDE	199
LPS-270S 270MB 12ms 128k SCSI	219
LPS-540A 540MB 12ms 128k IDE	299
LPS-540S 540MB 12ms 128k SCSI	329
EM-1080S 1.08GB 9.5ms SCSI-2	675
EM-1440S 1.4GB SCSI-2	819
EM-2100S 2.1GB SCSI-2	1195

SEAGATE

ST-3243A 214MB 16ms 32k IDE	175
ST-3290A 261MB 16ms 64k IDE	199
ST-3391A 341MB 12ms 256k IDE	209
ST-3655A 545MB 12ms 256k IDE	309
ST-3600N 525MB 10ms 256k SCSI-2	385
ST-31200N 1.05GB 9ms 256k SCSI-2	669
ST-12550N 2.14GB 8ms 1M SCSI-2	1399
ST-12500W 2.14GB Fast-wide SCSI	1499
ST-43400N 2.9GB 10ms 512k SCSI-2	1895
ST-15150N 4.3GB 8ms 1M SCSI	2495
ST-15230N 4.3GB 9ms 512k SCSI	2185
ST-41080N 9.0GB 11.5ms 1M SCSI	4565

WESTERN DIGITAL (3 yr. warranty)

WD-2340 340MB 12ms IDE	215
WD-2420 420MB 13ms IDE	245
WD-2540 540MB 12ms IDE	309
WD-2730 730MB 10ms IDE	449
WD-1111 1.0GB 10ms IDE	589

OTHERS

Impression CardDrive (2 slot PCMCIA)	185
Mounting Frame for 3.5" Hard / Floppy Drive	5/5
Removable Case for 3.5" HD IDE	39
Removable Case for 3.5" HD SCSI	42

7. I/O CARD

BOCA (fast chip serial)

Bocaboard w. cable (IRQ 3,4,5,7,10,11,12,15) - 4 port / 8 port / 16 port	79/119/239

KOUWELL

AT I/O (2S 1P) / AT I/O (2S 2P)	25/29
AT I/O (2S 1P 1G)	25
AT I/O (2S 1P 1G) w. 16550 chips	49
AT I/O (2S 1P 1G) w. IDE Controller	29
$ Serial Ports	45
Printer Card	15
Serial Card (XT, AT)	15

QUICKPATH

13 Port I/O w. 4-16550UARTs + Extd. IRQs (2IDE, 4F, 4S, 2P, 1G)	125
4 Serial, 16550UARTs, 8addr, 10IRQs (3,4,5,7,9,10,11,12,14,15)	99

SIIG (5 yr. warranty)

(2S 1P) w. 16550 chips	49

STB 4-COM

4 Serial, 16 bit, 16550, support Com 1-8, IRQ (2,3,4,5,10,11,12,15)	109

VITEX

AT I/O (2S 2P) w. 16550 chips	45

8. KEYBOARD

ANCER (black)

101 Key	42

FOCUS

FK2001 101 Click	42
FK9000 129 Key Programmable	59

NORTHGATE OMNI

101NI	69
102	69
Ultra T	95

SIIG (5 yr. warranty)

Suntouch Jr. 84 Key Mini	45
Supertouch 101 Click	53
Wavetouch 101 Soft	39

OTHERS

BTC 84 Key Mini	35
Honeywell 101	45
Keycat II 101 w. Trackball	65
Keytronic 101	35
Maxi 101	35
Maxi Key 124	59
Mitsumi 101	30
PT505C 101	25

9. MEMORY

DRAM

1MB x 1 - 80ns	6.20
256k x 4 - 80ns	5.50

SIMM

1MB x 9 - 60ns / 70ns / 80ns	39.5/38.5/38
4MB x 9 - 60ns / 70ns	149/145
16MB x 9 - 70ns	779
256k x 9 - 70ns / 80ns	14/13
1MB x 36 - 60ns / 70ns	169/160
2MB x 36 - 60ns / 70ns	330/320
4MB x 36 - 60ns / 70ns	625/619
8MB x 36 - 60ns	1280
For Mac : 4MB x 8 - 70ns / 80ns	159/155

SIPP

1MB x 9 - 70ns (3 chips)	41

COMPUTER MEMORY (3rd party)

Compaq

for Deskpro 386N - 2MB / 4MB / 8MB	109/199/369
for Deskpro 386SX20 - 2MB / 4MB / 8MB	109/159/319
for Deskpro 386-20e/ 20/ 25e - 4MB	225
for Deskpro 486M - 2MB / 4MB / 8MB	109/199/369
for LTE 286 - 2MB / 4MB	129/195
for LTE 386S20 - 4MB	239
for SLT 286 - 1MB / 4MB	99/259
for Prolinea 386-25ZS/ 25S - 2MB / 8MB	105/379
for Prolinea 486-33/ 50/ 25S - 4MB / 16MB	175/639

IBM

for PS/2-50Z/ 55SX/ 65SX/ 70 - 2MB / 4MB	129/229
for PS/2 80-111/ 311/ 121/ 321 - 4MB	225
for PS/2 80-A21/ A31/ A6 - 4MB	229

KINGSTON MEMORY

current price	call

LAPTOP / NOTEBOOK (3rd party)

AST

for Exec - 4MB	155

Compaq

for Contura 3/ 20/ 25 - 4MB / 8MB	220/379
for LTE-Lite 20/ 25/ 25C - 4MB / 8MB	249/399

IBM

for L40SX/ N33SX - 4MB / 8MB	199/399

Macintosh

for Powerbook 140/ 170 - 6MB	299

NEC

for Ultralite III-SL25C/ SX20 - 4MB / 8MB	239/419

Packard Bell

for 386SX - 2MB / 4MB	155/259

Panasonic

for 170/ 270/ 370 - 1MB	99

Toshiba

for T1600 - 2MB	139
for T2200SX - 2MB / 4MB / 8MB	119/229/379
for T3100SX - 2MB / 4MB	129/209
for T3200 - 3MB	169
for T3200SX - 2MB / 4MB	129/209
for T3400 - 4MB / 8MB	239/449
for T5100 - 2MB	129
for T5200/ T8500 - 2MB / 8MB	129/449
for T6400 DX/ SX/ SXC - 4MB / 8MB	220/379

LASER PRINTER MEM. UPGRADE

JET RAM (3rd party)

for Epson EPL6000 - 2MB / 4MB	155/245
for HP Desk Jet 500/ 500C - 256k	69
for HP Laser Fax - 1MB	80
for HP Laser Jet II/ IID - 1MB / 2MB / 4MB	99/145/235
for HP Laser Jet III/ IIIP/ IIID - 1MB / 2MB / 3MB / 4MB	79/125/169/215
for Panasonic KX-P4410/ 4430 - 1MB / 2MB / 4MB	95/139/229
for Panasonic KX-P4420/ 4450i - 1MB / 2MB / 4MB	99/145/235
for Panasonic KX-P4450 - 1MB	139
for Panasonic KX-P4455 - 2MB	169
for Panasonic KX-P4400/ 5400 - 2MB	185
for QMS PS410 - 1MB / 2MB / 4MB	99/145/235
for QMS PS815/ 825 - 2MB / 4MB	159/249
for Texas Instruments Micro Writer - 1MB	69
for Texas Ins. Micro Laser Turbo XL - 1MB	69

PACIFIC DATA

1-2-4 Plus for HP II/ IID - 1MB / 2MB / 4MB	115/159/249
Pacific 4 for HP IIP+/ IIIP/ III/ IIID - 1MB / 2MB / 4MB	89/135/225
Pacific 4 SIMM for HP4P/ 4MP/ 4+/ 4M+ - 4MB / 8MB	165/320
Pacific 4 SIMM for HP 4/ 4+/ 4Si/ 1200C - 4MB / 8MB	189/375
Pacific 4 SIMM for ProTracer - 8MB	515

10. MODEM & FAX

BOCA

14.4 Fax Data Voice Int	135
14.4 Fax Int / Ext	99/125
14.4 Pocket Fax	169
28.8 Fax 14.4 Modem Int / Ext	199/235

GVC

14.4 Fax Int / Ext	99/119
PCMCIA 9624 Fax / 144 Fax	109189

HAYES

Accura 2400 Int / Ext	65/75
Accura 144 + Fax Int / Ext	*(129/149)
Accura 28.8 Fax 14.4 Modem Ext	275
ESP Communication Single / Dual	85/125
Optima 144 Fax Ext	389
Optima 288 B Fax 144 Int	379
Optima 288 V.Fast 144 Fax Ext	435
PCMCIA Optima 144 Fax	285
SmartCom for Windows	*(47)

INTEL

Faxability software	*(25)
Faxability Plus/OCR 2.0 for Windows	*(75)
New Fax Modem 24/96 Int	55
New Fax Modem 96 Int / Ext	109/129
New Fax Modem 144 Int / Ext	119/139
PCMCIA 144 Fax	*(229)
PCMCIA 144 International Fax	415
SatisFAXtion w. Faxability Software - 400 144/144 v.42, v.32bis, MNP5 Int	269
- 400e 96/144 4k data buffer Ext	*(289)325

MEGAHERTZ

PCMCIA XJ124FM 96/24 Fax w. X-Jack	*(99)
PCMCIA XJ1144 144 Fax w. X-Jack	*(225)
PCMCIA XJ2144 Gold Series	255
Pocket P2144 144 Fax	245

MICROCOM

Deskporte ES 28.8 Fast 14.4 Fax Ext	245
Deskporte EP 28.8 Fast 14.4 Fax Ext	335
Microporte 4232bis Fax	465

PRACTICAL PERIPHERALS

Fax Me (turn HP laser to fax receiving)	*(99)
Mini Tower 144FX144 Ext	*(139)
PM144FX144 Int	119
PCMCIA 144 Fax	279
Pocket 144 Fax	299
288 Fax 144 Ext (PC 288 LCD)	359

SHIVA

Net modem/E Ethernet BNC/TP	1475

SMARTLINK (w. AT&T chips)

1414BAV 144 Fax w. Software Int	95
1414AV 144 Fax w. Software Ext	125
1414PAV Pocket 144 Fax	159
1914BAT 19.2/14.4 Fax Int / Ext	119/145

US ROBOTICS

Courier 16.8 Int / w. Fax	435/475
Courier 16.8 Ext / w. Fax	465/525
Courier v32 Terbo Fax 19.2MB w. ASL Int	359
Courier v32 Terbo Fax 19.2MB w. ASL Ext	379
Sportster 144/144 Fax MNP5 Int / Ext	109/129
Sportster 144/144 for Mac Ext	149
Sportster 28.8/14.4 Fax Int / Ext	185/199
Worldport PCMCIA 144 Fax	189

ZOOM (7yr. Warranty fr. Zoom)

96/96 w. WinFax Lite Int / Ext	105/125
144/144 w. WinFax Lite Int / Ext	129/149
144/144 Fax Modem & Voice Int / Ext	159/179
28.8 V.Fast 14.4 Fax Int / Ext	199/229
VPF 144 Fax, 24k Int	159

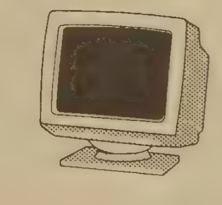
ZY-XEL

U1496B 16.8 Voice 14.4 Fax w. Software Int	289
U1496B+ upgradable rto 19.2Kbps Int	397
U1496E 16.8 Voice 14.4 Fax, LED Ext	299
U1496E+ upgradable to 19.2Kbps Ext	399
U1496P Portable 16.8/14.4 Fax 2 line	389

OTHERS

CommShare 550 Phone & Fax Auto-switch	89
CommShare 750 4 Port Switching	109
National Semiconductor TyIN 2000 Int	89
SIIG TeleCommunicator 10-in-1 Fax	219
Supra 144 Fax Int / Ext	99/129
Winport (fax & modem sharing software)	185

11. MONITOR



EMC

EM1412 14" Mono Amber, 90-260v	95
EM1417 Mono Paper White VGA	119

HITACHI

CM1797M 17" 1280 x 1024 .26 NI	975

KFC

CT1428A 14" 1024 x 768 .28 NI	249
CA1507 15" Flat 1280 x 1024 .28 NI	399
CA1718 17" Flat 1280 x 1024 .26	745

---

*(price) .... special , while supplies last

MAG (auto switch power)

DX15F 15" 1280 x 1024 .28 NI (no LED)	389
DX17F 17" 1280 x 1024 .26 NI (no LED)	689
MX15F 15" MPRII Flat 1280 x 1024 .28 NI	459
MX17F 17" Flat 1280 x 1024 .26 NI	849
Mac Adapter	25

MITAC (3 yr. warranty)

M1564 15" 1280 x 1024 .28 NI	339
M1775 17" 1280 x 1024 .28 NI	659

NANAO

F340iW 15" Flat 1024 x 768 .28 NI	635
F550i 17" 1280 x 1024 .28 NI	899
F550iW 17" 1280 x 1024 .28 NI	979
F560iW 17" 1280 x 1024 .26 NI	1199
T560i 17" 1280 x 1024 .25 NI	1445
T660i 20" 1280 x 1024 .31 Trinitron NI	1995
F760iW 21" 1280 x 1024 .31 NI	1915
F780iW 21" 1600 x 1280 .26 NI	3095

NEC

SVGA 14" 1024 x 768 .28 NI	329
3FGe 15" 1024 x 768 .28 NI	559
3V 15" 1024 x 768 NI	429
4FGe 15" Flat 1024 x 768 .28 NI	625
5FGe 17" 1024 x 768 .28 NI / w. Lens	955/1035
5FGp 17" 1280 x 1024 NI	1129
6FGp 21" 1280 x 1024 NI	1995
NEC Monitor Lens : Anti-reflection, Anti-satic for 4FG / 5FG / 6FG	75/*(99)/185
FG/MacII Cable Adapter Kit	9.95

NOKIA

449E 15" 1280 x 1024 .28 NI	499
447B 17" 1280 x 1024 .25	935
447X 17" 1600 x 1280 .25 NI	1079
445X 21" 1600 x 1280 .26	2485

OPTIQUEST

1000S 14" 1024 x 768 .28 NI	269
1500D 14" 1280 x 1024 .28 NI	359
2000DX 15" 1280 x 1024 .27 NI	399
4000DS 17" 1280 x 1024 .27 NI	745
4000DC 17" 1280 x 1024 .27 NI	765

PANASONIC

C1795E 17" 1280 x 1024 .28 NI	685
C1991 20" 1280 x 1024 .31 NI	925

PROTON

PM1561A 15" 1280 x 1024 w. speakers built-in	365

SIIG

9" VGA Mono Paper White 640 x 480	135

SONY

15ST 15" 1280 x 1024 .25 NI	449
17SE 17" 1600 x 1280 .25 NI	975
20SE 20" 1280 x 1024 .30 NI	1835

STANDARD TECHNOLOGIES

400-M 14" VGA Paper White	119
428-VESA 14" 1280 x 1024 .28 NI	249

VIEWSONIC

4e 14" 1024 x 768 .28	279
5+ 14" 1024 x 768 .25 NI, MacII	475
6e 14" 1024 x 768 .28 NI	295
14e 14" 1024 x 768 .28 NI, MPRII	349
15EX 15" Flat 1024 x 768 .28 NI, MacII	399
17 17" 1600 x 1280 .27 NI, MacII	955
17G 17" 1280 x 1024 .28 NI	825
20 20" 1600 x 1280 .28 NI, MacII	1535
21 21" 1600 x 1280 .26 NI, MacII	1789
Mac Cable Adapter	35

12. MOTHERBOARD

AIR (w/o cpu)

486-DX2-66 256k, 3VLB slots, built-in AT I/O	189
486-33 / DX2-66 256k, EISA, 3VLB slots	349
486SH - 33 / DX2-66 256k, Green PC	145
586-60 256k, PCI ISA VLB, built-in AT I/O	385
586-60 256k, PCI EISA VLB, Fast-wide SCSI	615

AMI (w/o cpu)

Super Voyager II 486-33 256k VLB, 7 slots	375
Super Voyager II 486-DX2-66 VLB, 7 slots	375
Enterprise IV 486-33 256k EISA VLB	485
Enterprise IV 486-DX2-66 256k EISA VLB	485

ALARIS (IBM)

486SLC-66 64k VLB w. CPU & Math Proc	259

DIAMOND

486-DX Fast Bus VLB, w/o cpu	169

IBM

486BL3X-75MHz VLB w. CPU & Math Proc	379
486SLC-33 / 66 16k ISA w. CPU & Math Proc	239

INTEL PREMIERE (w/o cpu)

586-90MHz 256k PCI	465

LYNX (USA made)

486-33 / 50 / DX2-66 256k VLB, w/o cpu	135

MICRONICS (w/o cpu)

BCP 386-33 64k, 4MB max	85
486-33 / DX2-66 256k VLB	235
JX30 486-DX2-66 256k VLB w. Zif socket	259
486 - 33 / DX2-66 256k EISA VLB	475
486-DX2-66 256k EISA E2	395
586-60 256k, ISA PCI, 3PCI slots	465
M5PE 586-60 / 66 256k EISA	595
M54PI 586-90 w. CPU & IDE I/O (Neptune)	1345

NICE (w/o cpu)

486-33 / DX2-66 256k VLB, Green PC	169
486-50 / DX2-66 256k Mini EISA VLB	225
486-50 / DX2-66 256k EISA VLB	315

SUPER P5VL & P54VL-PCI

Pentium P5VL-PCI 586-66 256k Flash Bios	335
Pentium P54VL-PCI 586-90 256k Flash Bios	435

OTHERS (w/o cpu)

486-33 128k ISA	105
486-33 256k ISA	119
486-DX2-66 256k PCI, Built-in SCSI & AT I/O	275

13. MOUSE & JOYSTICK

AGILER

ATB-610 Serial Trackball	21.50
Master Plus 400	16.50

ANCER (black)

3-button	22

KENSINGTON

Expert Bus 4.0	119
Expert Serial & Trackball 4.0	99

LOGITECH

C14 Serial 2-button oem	19
Cordless II	85
Cyberman 3D Controller	69
Dexxa Serial	19.50
First Serial C15 oem / reg	25/31
Fotoman Plus Camera for PC & PS/2	549
Mouseman Bus oem / reg	49/64
Mouseman Serial oem / reg	34/50
PG15 Bus oem	45
Trackman Portable / Trackman II	69/75

MICROSOFT (USA made)

Ball Point Portable	85
Bus 2.0 400dpi oem / w. Bus Card	43/65
Bus 2.0 w. Expansion Card	79
Mouse 2.0 + Windows 3.1	149
PS/2 2.0	59
PS/2 & Serial Mouse 400dpi oem	49
Serial 2.0 400dpi oem / manual	39/2.50
Serial 2.0 w. 9 to 25 pin Adapter	58

MOUSE SYSTEMS

Cobra (joystick)	11.50
Mouse! Serial	19
New Point (trackball for laptop & PC)	*(29)
PC Mouse (3-button optical)	39.50
PC Trackball II	45
Serial Bus Card (9IRQs)	29
The New Mouse 400dpi (3-button)	39

JOYSTICK :

THRUSTMASTER

ACM Gamecard	29
Flight Control System / Pro	68/*(114)
Flight Stand Holder	19
Formula T1 (drive control)	129
Rudder Control	115
Weapon Control MKII	*(99)

OTHERS

Quickshot Smart Game Card	16.50

14. NETWORK

3COM

3C503 Etherlink II 16 bit coax / TP	165/175
3C507 Ethernet 16 bit coax / TP	289/299
3C509 Etherlink III coax / 5 pack	118/529
3C509 Etherlink III TP / 5 pack	119/*(515)
3C509 Etherlink III Combo / 5 pack	139/559
3C529 Etherlink III for MCA caox / TP	235/239
3C579 Etherlink III EISA coax / TP	228/229
3C589 PCMCIA TP / Combo	199/249
3C16270 Link Builder TP (12TP + 1AUI)	345

ADDTRON

AE-200JL Jumperless BNC & TP	55
Boot Prom 16 bit	15
ET-200STS NE2000 coax (BNC + AUI)	55
HUB: UTP8/L (8TP + 1BNC)	155
HUB: UTP16 (16TP + 1BNC) + 1AUI)	399
Pocket Adapter BNC	115
Transceivers: ET10TB (TP<->AUI)	39
Transceivers: ET10CB (BNC<->AUI)	39

ALLIED TELESIS (CentreCOM)

AT-1500T / AT-1700T TP	*(69)/79
Transceivers: MX10 / 210T	42/42

ARTISOFT (Lantastic)

Central Station II	399
Corstream Server 5-user	625
Corstream Server 5-user + Eagle EP3210	775
Corstream Server 10-user + Eagle EP3210	1495
Lantastic Z 5.0 (2 stations)	89
Lantastic for TCP/IP single / 5-user	199/785
Lantastic 6.0 Starter Kit coax 2-user	*(285)
Lantastic 6.0 Add On NR-SI 2000C	*(135)
Lantastic 6.0 Add On NR-SI 2000T	155
Lantastic 6.0 Software single user	85
- for 5-user / 10-user	339/599
- upgrade for single / 5-user	39/129
NR2000C BNC only	167
NR2000T RJ45 only	169
NR-SI 2000C coax / 5 pk / 10 pk	85/375/685
NR-SI 2000T TP / 5 pk / 10 pk	84/379/689
NR-SI 2000A Combo	115
NR-SI 2000M for MCA	139
Remote Boot ROM for NR2000	45
T-Runner 8 Port HUB / 12 Port HUB	315/515
Eagle Ethernet Cards :	
- Eagle EP2000 coax / TP	89/85
- Eagle EP3210 coax / TP	165/159
- Eagle NE2000 Plus Ethernet coax / TP	92/89
- Eagle NE3200 EISA coax w. TPA (FS)	465
- Eagle NE3210 EISA 32 bit Combo	199

ASANTE (for Mac)

AH1012 Intelligent HUB 12 Port	875
10T HUB 8 Port / 12 Port	255/495
FriendlyNet with AUI /BNC /TP	69

BOCA

HUB: 8 Port / 16 Port	149/269
PCI 32 bit Ethernet Combo	89
PCMCIA 10BT Ethernet	169

CASTELLE

JetPress (network Print server) for HP II. IID, III, IIID, coax / TP	429
LANPress (print server connects up to 4 printers)	
- Ethernet Thick/Thin coax (1P 3S)	475
- Ethernet 10BaseT (1P 3S)	475
- Ethernet BNC & 10BaseT (2S 2P)	435

CeLAN

Flex HUB Ethernet SNMP	call
Repeater	call

D-LINK

PCI 32 Ethernet Combo	195
VLB 32 Ethernet Combo	295

DCA

Crosstalk 2.1 for Windows	109
Communicator	58
IRMA Workstation Dos / Win	225/359
IRMA 3270 for MacII/ LC/ SE	735

FARALLON

PN381 PhoneNet w. Timbuktu for Win	259

IBM

Ether 16 coax / TP / Combo	89/85/95
PCMCIA 10B2 / 10BT	255/235

INTEL

EtherExpress LAN Combo	129
EtherExpress Flash LAN Combo / 5 pk	135/625
EtherExpress 16 coax / 5 pk	112/465
EtherExpress 16 Flash coax	122
EtherExpress 16 TP / 5 pk	109/*(445)
EtherExpress 16 Flash TP / 5 pk	119/545
EtherExpress 16 MCA coax / TP	175/185
EtherExpress 32 EISA coax (FS)	439
EtherExpress Pro 8/16 bit Combo	129
Flash EISA Combo (WS)	235
HUB: 12 Port EtherExpress ISA / EISA	565/645
LAN Project 1.5 (virus protection)	685
LAN Sight Support 4.0	345
LAN Spool s/w 386 NLM v3.5A	425
Netport II Thin & Thick / 10 BT	395/399
Netport Express XL	465
NetSatisfaxtion 2.5 for Novell	955

LANPRO

2000JC 16 bit BNC only	45
2000JT 16 bit TP w. cable	45
2000JA 16 bit Combo	49
Dos 7 + 2000JC	75
EP3010A Pocket Combo	129
HUB ER5390: 8 Port (8TP + 1BNC)	169
HUB ER5396: 16 Port (16TP + 2BNC)	355
Netware NE2000 Combo Starter Kit	159

NATIONAL SEMICONDUCTOR

InfoMover NE2000+ coax / 5 pack	85/399
InfoMover NE2000+ TP / 5 pack	79/355
InfoMover NE2000+ Combo / 5 pack	99/475
InfoMover NE4100 PCMCIA coax	175
InfoMover NE4100 PCMCIA TP	179

NOVELL

Dos 7 (includes Personal Netware)	55
EPROM for NE2000	35
Microdyne NE2000+ coax / 5 pack	95/425
Microdyne NE2000+ TP / 5 pack	89/*(399)
Microdyne NE2000+ Combo / 5 pack	109/*(465)
Microdyne NE3200 EISA coax / TP	450/450
Netware 3.12	
- 5 / 10 / 25-user	615/1495/2195
- 50 / 100 / 250-user	2695/3995/6995
Netware 4.01	
- 5 / 10 / 25-user	825/1795/2625
- 50 / 100 / 250-user	3595/5495/9695
Personal Netware oem / reg	45/75
Personal Netware 5-user Kit	265
Personal Netware NE2000 coax 2-user Kit	149
Unixware Personal Edition - CD version	175
Unixware SDK v1.1 - CD version	75
Unixware NFS	135

SMC (Western Digital)

8003 Plus Elite 8 bit caox	99
8013 Plus Elite 16 coax / 6 pack	118/595
8013 Plus Elite 16 TP / 6 pack	119/599
8013 Plus Elite 16 Combo / 6 pack	139/775
8013 Plus/A for MCA / TP	*(175)/199
8033 Elite 32 coax / TP	595/599
8 Port Concentrator (8TP + 1AUI)	349
12 Port Concentrator (12TP+2AUI+1BNC)	595
Elite Ultra 16 coax oem / reg	89/109
- 6 pack	*(489)535
Elite Ultra 16 TP oem / reg	88/108
- 6 pack	*(455)495
Elite Ultra 16 Combo oem / reg	99/119
- 6 pack	*(549)585
Elite Ultra 32 EISA Combo	229
Netware Boot ROM for Ethernet	34
Tiger HUB: 3206TA 6 Port	199

SYNOPTICS

Network products	call

XIRCOM

PCMCIA CE-10B2 / CE-10BT	*(235/229)
PCMCIA CE-10BC Combo	*(275)
PE3-10B2 Pocket Adapter caox	*(255)285
PE3-10BT Pocket Adapter TP	*(259)289
PE-3 10BC Pocket Adapter Combo	*(295)325
PEM-10B2 w. Modem	*(395)
PEM-10BT w. Modem	*(299)

CABLES & ACCESSORIES

10BaseT, Level 3 plenum 1000'	165
Belden 8259, RG58 1000'	165
RG58 500' / 1000'	65/109
Twited Pair 2-pair, PVC, Level 3	
- 500' / 1000'	45/59
Twisted Pair 4-pair, PVC, Level 3	
- 200' / 500' / 1000'	35/55/89

15. POWER SUPPLY

AMERICAN POWER CONVERSION

APC-400 Smart-UPS (286, 386 WS)	289
APC-600 Smart-UPS (386, 486 FS)	359
APC-900 Smart-UPS (386, 486, FS & WS)	569
APC-1250 Smart-UPS (multiple FS & WS)	699
APC-2000-2 2 Smart-UPS	1150
APC-400 Back-UPS (300W)	179
APC-450 Back-UPS (325W)	215
APC-600 Back-UPS (425W)	285
APC-900 Back-UPS (650W)	375
APC PowerChute Plus :	
- for Novell	65
- for OS/2, Lan Server, 3 Com	75
- for Unix / Xenix	99
- for Windows NT	69
Power Doctor (DOS) I/F Kit for Smart-UPS	79
Surge Arrest Unit	call

---

*(price) .... special , while supplies last

CENTRAL
COMPUTER SYSTEMS INC.
WIDE SELECTION AT LOW PRICES

TEL: 408 241-0185 FAX: 408 241-0390 820 Kiely Blvd. Santa Clara CA 95051 Page 4 / 7

GENERAL

250W for Baby AT	45
250W for Baby or Mid Tower	45
250W for AT	47
250W for Full Tower	49
300W for Full Tower	69
550W for UPS	279
1200W for UPS	659

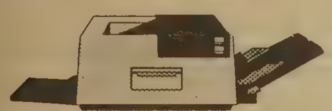
PC POWER COOLING

Standard 220 for Disktop / Full Tower	85/85
Silencer 270	
- for Slim (baby or mid tower)	149
- for AT Desktop / Full Tower	165/165
Turbo Cool 300	
- for Slim (baby or mid tower)	149
- for Desktop / Full Tower	175/175
Turbo Cool 450	
- for Desktop / Full Tower	325/325
Twinpower 900 (redundant)	925

TRIPP LITE

Isobar 4	*(29.95)
Isobar 6 w. Fax Modem Protection	*(45)
Isobar Console CC16 Plus w. RJ11	75
Isotel 4 w. RJ11	*(39.95)
UPS Monitoring Board for Netware	59

16. PRINTER



BROTHER

HJ-400 Desktop Ink Jet for PC or Mac	265

CANON

BJ-200E Ink Jet	319
BJC-600 Ink Jet Par. 360dpi	599

CITIZEN

GSX-145 24 pin, 132 column	355
GSX-220 24 pin	179
GSX-230 Fonts & Quiet	219
GSX-240 Scalable Fonts & Quiet	285
Projet II Ink Jet / after rebate	279/249
Accessories :	
- Color Option for GSX-130	45
- Color Option for GSX-145	65

DEC (Digital Equipment)

Printers	call

HP (Hewlett Packard w. toner)

Desk Jet 520	289
Desk Jet 500C	395
Desk Jet 560C	569
Desk Jet 1200C / Postscript PC, Mac	1429/2195
Laser Jet 4	1295
Laser Jet 4+ / 4M+	1399/1899
Laser 4L / 4ML	649/985
Laser 4P / 4MP	955/1355
Laser Jet 4Si / 4SiMX	2875/4095
Accessories :	
- Duplex C2016A for 4Si or 4SiMX	495
- Envelope Power Feeder 75 Sheet (HP4)	279
- J2371A Jet Direct for 10BT	429
- J2372A Jet Direct Combo	465
- Legal, Letter or A4 250 Sheet Tray (HP4)	99
- Legal, Letter or A4 500 Sheet Tray (HP4)	109
- Lower Cassette w. Letter Tray (IIP, IIIP)	149
- Optional 500 Sheet legal Letter A4 (HP4)	279
- Postscript for 4	329
- Postscript C2013A for 4Si	575
- Toner for II, III	79
- Toner for IIP, IIP+, IIIP	66
- Toner for 4	99
- Toner for 4L or 4P	69
- Toner for 4Si	135

LASER MASTER

Win Printer 800 Postscript	1075
Win Printer XL600 11x17, 600x660ppi	2350
Winjet 1200+ (postscript for HP4+)	*(675)775

MICROTEK

TrueLaser MTP-306 35 fonts, 6ppm, 2MB	*(795)

NEC

Super Script 610 Laser 6ppm, 300ppi	499

OKIDATA

ML184T 9 pin, Par	229
ML320 9 pin, Epson compatible	325
ML380 24 pin, Epson compatible	235
ML590 24-wire	429
OL410E Laser 4ppm, 600ppi	655

PACIFIC DATA

ProTracer II Ink Jet (CAD Plotter) a4 to A2 size, 360dpi, I960RISC, 512k, 45dBA	1259
ProTracer II-GL2 w. HP-GL2 & 2MB	1669
Accessories :	
- HP-GL Emulation Card	375
- Ink Cartridges	19.50
- Postscript Emulation Card	375
- Sheet Feeder I / II	135/115

PANASONIC

1150 9 pin, 55dBA	139
1624 32 pin	379
2023 24 pin, Quiet	185
2123 24 pin, 43.5dBA, Color capability	239
2124 24 pin, 43.5dBA, Color capability	319
3624 24 pin, 46.5dBA, Quiet	399
4410 Laser 5ppm, 512k	479
- Corona KX-PCR3	49
- Developer KX-PDP4 / KX-PDP5	110/125
- Drum KX-PDM4 / KX-PDM5	99/109
- Extra Cassette KX-PKC2	45
- Fonts Card KX-P47x	95
- Fuser Unit KX-PFS5	105
- Optional Second Cassette KX-P495	135
- Toner KX-P453	42
4420 Accessories	
- Developer KX-PDP2	95
- Drum KX-PDM2	99
- Envelope Tray KX-P431	59
- Legal Tray KX-P425	45
- Ozone Filter KX-PFT2	29
- Toner KX-P451	42
4430 Laser 5ppm, 1MB	665
- Accessories same as 4410	
4400 Led Page, ($50 Rebate + Free Toner)	499
- Apple Talk Interface KX-P412	179
- Drum Unit KX-PDM6	95
- Postscript Upgrade Board KX-PSU3	399
- Postscript Fax option KX-PFX1	259
- RS232 Serial Interface KX-P411	95
- Toner Kit KX-P445	17.50
4450 & 4450i & 4455 Accessories	
- Developer KX-PDP1	95
- Drum KX-PDM1	145
- Envelope Tray KX-P430	59
- Legal Tray KX-P420	45
- Ozone Filter KX-PFT1	32
- Toner KX-P450	42
4455 Postscript 11ppm	1695
5400 Led Postscript Page 4ppm ($100 Rebate + Free Toner)	799
- Accessories same as 4400	
Other Accessories :	
- 32k Buffer Dot Matrix KX-P43	65
- Auto Sheet Feeder for 1124 KX-P36	120
- Color Upgrade Kit KX-PCK11	55
- Serial Interface Card PS-13	75
- Single Bin Cut Sheet Feeder KX-PT10	95

QMS (Adobe Postscript)

PS410 4ppm, 2MB, 45 Fonts	925
- Envelope / Legal / Letter Tray	69/69/69
- Lower Cassette w. Letter Tray	149
- Toner	95

SEIKO

Smart Label Printer Pro / Plus	245/159
- Standard Label (2 rolls)	7.95

TEXAS INSTRUMENTS

Printers	call

LASER PRINTER ACCESSORIES

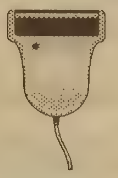
PACIFIC DATA

25 in One! for HP DJ500	99
25 in One! for HP II, IID, IIP, IIP+, III, 4Si	245
Complete Font Library for HP III, IIID, IIIP	255
Font Bank for all HP Lasers (stores soft fonts) 0.75MB / 1.5MB	205/269
Pacific Connect XI :	
for HP II, IID, III, IIID -	
- 5 Port 256k / 1MB (4S 1P)	309/379
- 10 Port 256k / 1MB (10S)	449/519
for HP 4, IIISi, Paint Jet XL300 -	
- 7 Port 1MB / 4MB (6S 1P)	449/649
- 10 Port 1MB / 4MB (10S)	519/179
Pacific DirectNet for Novell	369
Pacific DirectNet for Novell & Unix	499
Pacific DirectNet for Novell & TCP/IP	599
Pacific 4, Postscript for HP 4	259
Pacific Page 2MB, Postscript for HP II	365
Pacific Page II/XL 4MB, Postscript for HP II	699
Pacific Page PE for HP IID,IIP,IIP+,III,IIID,IIIP	279
Pacific Page PE 2MB	385
Pacific Talk	179
Postscript 4MB PE/XL for HP III	699
Plotter in a Cartridge for HP II	225
Plotter in a Cartridge PE for HP IID, IIP, IIP+, III, IIID, IIIP	225

PELICAN

Ribbons	call

18. SCANNER



ARTEC (hand)

ViewScan 256 w. OCR	89

HP (flatbed color)

ScanJet IICX Color w. Kit	945
- Auto Document Feeder	475
ScanJet IIP w. Kit (gray scale)	499

INFO (full page)

SF3GS Gray Scale 300dpi w. OCR	265
SF6C Color 600dpi w. OCR	435

LOGITECH (hand)

Scanman Easy Touch w. OCR	189
Scanman 256	169
- w. Omni Page OCR	185
Scanman Color	355
- w. Omni Page OCR	399

MICROTEK (flatbed color)

Scan Maker II w. Photoshop L.E.	649
Scan Maker IIHR	1045
Scan Maker III	2495

MOUSE SYSTEM (hand)

Page Brush 256 w. OCR	85
Page Brush Color	275

TAMARACK (flatbed color)

ArtiScan 24 bit, Color / 256 Gray Levels	
- w. Pub. L.E. & OCR 600 / 800 / 1200 dpi	575/675/945
- w. Phtostyler 600 / 800 / 1200 dpi	745/845/1115
- w. Photoshop 2.5 600 / 800 / 1200 dpi	745/845/1115
Slide Scan Kit (transparency, slide, X-ray) 600 / 800 / 1200 dpi	525/525/595

OTHERS

Fax Scanner (turn fax into scanner)	*(39)79
Omni Scan 256 for Win	*(259)

19. TAPE BACKUP

COLORADO

Backup for Win	39
DJ-20 250MB QIC-80 oem / reg	149/159
- 3M DC2120 Tape Cartridge	14.50
- AB-11 External Tape Port	37
- Cable (2FD & tape backup)	6
- FC-20 Controller	79
- KE-09 External Kit w/o Controller	69
- TC-15 Controller w. Data Compression	169
- Unix / Xenix Driver	99
PT-10 PowerTape 1GB SCSI Int	599
PT-25 PowerTape 2GB 300Kb/s Int	965
PTE-25 PowerTape 2GB Ext	1095
PT-50 PowerTape 4GB 300Kb/s Int	1525
PTE-50 PowerTape 4GB Ext	1655
Tracker 120MB (printer port)	285
Tracker 250MB (printer port)	319

CONNER

CNR-C250MQPT 250MB Ext	315
CNR-2150S 250MB Int	325
CNR-2525S 525MB Int	469
CNR-4320RT 2GB Int	745
CNR-4350XT 2GB Ext	985
CNR-4324RP 4GB Ext	849
CNR-4354XP 4GB Ext	1145
Tape Stor 250MB w. 3M Cartridge	145

EXABYTE

EXB-2501 750MB - 1.5GB SCSI-2 Int	515
EXB-2501 750MB - 1.5GB SCSI-2 Ext	685
EXB-4200 4mm Dat. 2GB Int / Ext	845/995
EXB-8205 8mm Dat. 2.5 - 5GB Int	1375
EXB-8205 8mm Dat. 2.5 - 5GB Ext	1645
EXB-8505 8mm Dat. 5 - 10GB Int	2085
EXB-8505 8mm Dat. 5 - 10GB Ext	2350
FS1G w. Control Kit (2501 drive, Adaptec 1522, cables, cartridge, s/w) Int / Ext	699/899

HEWLETT PACKARD

35480 4mmDat. 8GB SCSI Int	1069

IOMEGA

250MB Insider 3.5" w. 5.25" frame	185

20. VGA CARD

(All cards 1024 x 768 except stated)

ATI

Graphics Ultra Plus 2 DRAM w. mouse	199
Graphics Ultra Pro 2 ISA w. mouse	279
Graphics Ultra Pro 2 VRAM VLB	265
Graphics Ultra Pro 2 EISA	325
Graphics Ultra Pro 2 PCI	315
Graphics Pro Turbo 2MB PCI / VLB	379/379
Graphics Pro Turbo 4MB PCI / VLB	589/589
Graphics Wonder 1MB ISA	135
Graphics Wonder 1MB VLB	139

CARDEX

Cirrus Logic GD5434 64 bit 2MB PCI	199
ET4000 Tseng Lab 1MB ISA / VLB	79/109
ET4000 W32i VLB 1MB	129
ET4000 W32i VLB 2MB	179
ET4000 W32p 2MB PCI	199
S3 Vision 864 64 bit 2MB PCI	199

DIAMOND

Stealth 24 DRAM 1MB ISA / VLB	139/145
Stealth 32 2MB PCI / VLB	199/199
Stealth 64 2MB PCI / VLB	339/339
Stealth 64 4MB PCI / VLB	469/469
Stealth Pro VRAM 1MB ISA / VLB	225/235
Stealth Pro VRAM 2MB ISA	309
Stealth Pro VRAM 2MB VLB oem / reg	289/315
Viper P9000 VRAM 2MB VLB	349
Viper SE VRAM 2MB PCI oem / reg	299/379

MATROX

IMP/3AH 1600 x 1200, 3MB ISA	699
IMP/3VH 1600 x 1200, 3MB VLB	699
VLB/2 1280 x 1024, 2MB VLB	425
VLB/2 Plus 1600 x 1200, 2MB VLB	465
PCI/2 1600 x 1200, 2MB PCI	399
PCI/2 Plus 1600 x 1200, 2MB PCI	429
PRO/4.5ZV 1600 x 1200, 8MB VLB	1359
Upgrade/2 2MB Memory	235

MEDIA VISION

ProGraphics 1024 VL 256 Color 1MB	*(199)239
ProGraphics 1024 VL 16m Color 2MB.	*(285)339
ProGraphics 1280 4MB	675

METHEUS

Premier 928 VRAM 4MB	765
Premier 928VL VRAM 2MB VLB	599
- 1MB VRAM Memory upgrade	129

NUMBER NINE

T134020, 1280 x 1024, 90Hz, S3-928 chip	
- GXe Level 10 VRAM 1MB ISA	259
- GXe Level 11 VRAM 2MB ISA / VLB	335/339
- GXe Level 12 VRAM 3MB ISA / VLB	395/405
- GXe Level 14 VRAM 4MB ISA / VLB	599/599
- GXI-TC L29 72Hz, VRAM 4MB, DRAM 1MB.	1385
GXe-64 DRAM 1MB PCI / VLB.	195/195
GXe-64 DRAM 2MB PCI / VLB	259/259
GXe-64 Pro VRAM 2MB PCI / VLB	349/349
GXe-64 Pro VRAM 4MB PCI	529

ORCHID

Fahrenheit 1280+ DRAM 1MB ISA	135
Kelvin 64 Win Accel 1MB PCI / VLB	155/155
Kelvin 64 Win Accel 2MB PCI / VLB	199/199

OTHERS

CGA / MGP Card (monographic w. printer port)	29
Intel Smart Video Recorder	*(369)
Oak087 Super VGA 512k	52
Oak087 Super VGA 1MB	65
Paradise Window Accel 24 bit	129
Video Plus (video image grabber)	195
V-Mate Pro (flicker free ext. video encorder)	199
WinVision (video capture)	165

*(price) .... special , while supplies last

CENTRAL
COMPUTER SYSTEMS INC.
WIDE SELECTION AT LOW PRICES

TEL: 408 241-0185 FAX: 408 241-0390 820 Kiely Blvd. Santa Clara CA 95051 Page 5 / 7

SOFTWARE

1. CD SOFTWARE

Call for Wholesale Prices

$5.99 Each

- 3D Dinosaur Sampler
- Clip Media 2.0
- Club Kid Soft
- Lazer Tax (480 tax forms)
- Mayo Clinic: Sampler
- Selectware
- Shareware Collection
- Super Game I

$6.99 Each

- Game Arena
- Jokes and Pranks
- Sneak Peaks
- Super Game II
- VGA Spectrum
- Wave Pool

$7.99 Each

- Clipart Studio III
- Business Assisant
- Dr. Fun Pack
- Dr. Games
- Dr. Music
- Dr. Shareware
- Dr. Windows
- Shareware Treasure Chest
- Significant Shareware
- Super Game III

$8.99 Each

- American Premier Shareware
- California Collection
- Cybergenic Ranger (adventure game)
- Desktop Bookshelf
- Sound Library
- US Atlas 4.0 MPC

$9.95 Each

- 5 Star Game - Education
- Adventure in Heaven DOS
- Audio Tester
- Better Windows & Works
- Colossal Cookbook DOS
- Cookbook Heaven
- Font Expert MPC
- Font Platinum
- Game Expert MPC
- Game Platinum WIN
- Home & Business Platinum
- Learning Adventure
- Mixed Up Mother Goose DOS
- Multimedia Platinum
- Publisher's Platinum
- Shareware Heaven
- Sing-a-long Children (Dr. T's) MPC
- Utilities Platinum
- Windows Expert MPC
- Windows Heaven
- Windows Platinum
- Wizard (test & tune-up) MPC
- World Atlas 4.0 MPC
- Worldcup 94' Soccer

BORDERBUND

Arthur's Teacher Trouble MPC / MAC	17/37
Just Grandma and Me WIN / MAC	17/37
Little Monsters At School MPC	36
MYST MPC / MAC	48/49
Ruff's Bone MPC	36
The New Kid On The Block / for MAC	35/37
Tortoise and the Hare / for MAC	35/37
Where in the World is Carmen Sandiego oem	19

CHESTNUT

All Titles	8.95 each

- 3 Stoogers
- Betty Boop
- Bible and Religion
- Bugs Bunny
- Caricatur Classic (spanish)
- Classic Cartoon
- Clip Art Warehouse
- Complete Home and Office Legal Guide
- Computer Refernce Library
- Death Star Arcade Battles
- Dictionary and Languages
- Encyclopedia of Sound
- Flash Card Video (Math for grade 2-5)
- Game Jumboree
- Gardening
- Godzilla vs. Megaton
- Ham Radio
- Hillarious Sports Bloopers
- HIV Resource AIDs Guide
- Hugo House of Horrors
- Midi Master Collection
- Multimedia Manian
- Night of the Living Dead
- Our Solar System
- Personal Finance
- Porky Pig
- Sound Sensation
- Technotools
- The Complete Book Shop
- Windoware
- World Traveler

-- Shareware Overload Trio Pack	19

COREL

Corel Artshow 93' (book + CD)	24
Corel Artshow 94' (book+CD) / CD only	29/19.50
Corel Gallery	*(25)
Corel Professional Photo CD	19 ea.

- Butterfly - Coast - Food - Field
- Hawaii - Lakes & Rivers - Resident Interior
- Sampler - Sun Rise & Set - Tree & Leaf
- Water Falls - Wild Animals
- Yellowstone Park - Undersea Reef

Discis Series DOS, WIN, MAC

Aesop's Fables / Butterflies (oem)	19.95/13
Cinderella / Dinosaurs (oem)	19.95/13
Farm Animals	13
Heather Hit Her First Home Run	19.95
-Long Hot Dat at the Ranch	19.95
Moving Gives Me Stomach Ache	19.95
Mud Paddle	19.95
Paper Bag Princess / Spiders (oem)	19.95/13
Paper Bag Princess + Mud Paddle (oem)	15
Tale of Benjamin Bunny oem / reg	13/19.95
Tale of Peter Rabbit	19.95
Thomas Swimsuit	19.95
Thomas Swimsuit + Cinderella (oem)	15
The Night Before Christmas	19.95
The Sacary Poems for Rotten Kids	19.95
Whales (oem)	13

Dream Team

Alphabet Blocks (age 3-7) MPC	19.50
Advanced Spelling Tricks (age 9-12)	19.50
Basic Spelling Tricks (age 7-10)	19.50
Beginning Reading (age 4-7)	19.50
Early Math MPC	19.50

MEDIA VISION

- Critical Path oem / reg	19/26
- Forever Growing Garden oem / reg	19/26
- Plan-It Adrenaline	26
- Plan-It Earth	26
- Plan-It Paradise for Win	26
- Quantum Gate oem / reg	19/26
- Wrigging in Story Land oem / reg	19/26

MICROSOFT

Art Gallery Multimedia MPC	55
Cinemania 94' MPC / MAC	(oem 29)55/57
Complete Baseball MPC	*(49.99)
Dinosaur MPC / MAC	(oem 29)55/57
Encarta 94' MPC	(oem 55)85
Golf MPC	(oem 19)48
Multimedia Beethoven 9th Symphony	55
Multimedia Bookshelf 93' WIN	19
Multimedia Bookshelf 94' WIN	(oem)4565
Multimedia Mozart MPC	55
Multimedia Stravinsky MPC	55
Musical Instruments MPC / MAC	55/57
Schubert MPC	55

POWER SOURCE

All titles	7.50 each

- 3D Animator - 16 bit Sound Masterpiece
- 49er Windows Games - 14000 Multi. Programs
- All You Can Play - Beauty of San Francisco
- Business Library - Chinese Paining
- Chinese Common Idioms and Games
- Chinese Recipe - China Traveler
- Clip Art Library - Communication Master
- Computer Super Market
- Desktop Publisher's Dream
- Fashion Show 94' - Game Galore
- Interactive Chinese & Games
- Library Images - Math Made Fun
- Midi & Wave Music - Music Box 94'
- Music From Heaven
- Taiwan Folks Music I, II - Top 101 Shareware
- Windows 51 Games - World fo Education

Swimware Series

- Exotic Girls 3-in-1	17
- Island Girls 3-in-1	17
- Local Firls 3-in-1	17
- Lovely Lady II	29
- Swimwear To The Maxx	18
- The Women of Venus	20
- Tropical Girls 3-in-1	17

WALNUT CREEK

4.4 BSD Lite	17
Ada CD Rom	18
C User Group Library	22
CD Rom of CD Rom	17
CICA MS Windows 94'	13
Clipart Cornucopeia	17
Fractal Frenzy	17
Garbo DOS, MAC	13
GIF Galore	17
Giga Games (3000 titles)	15
Hobbes OS/2	15
Info MAC III	24
Inter Net Info	18
Libris Brittania	25
Linux Tool Kit	14
Nova for NEXT	25
Plug and Play Linux 94'	22
Project Gutterburg	18
QRZ: Ham Radio	13
Sentimental Wings	26
Simtel MS Dos	13
Source Code for Unix	18
Space and Astronomy	17
TCL/TK Source Code	19
Travel Adventure	18

OTHERS

3D Body Adventure DOS, WIN	43
3D Dinosaur Encyclopedia DOS	15
7th Guest DOS	19
9 Digit Zipcode Phonebook	17
70 Million Households Phonebook 94'	22
20th Century Vudeo Almanac DOS	25
101 Best Selling Games DOS	15
200 Games	21
250 World's Greatest Music Clips	17
300 Waycool Windows Games	14
A Hard Day's Night WIN	17
A Million Laughs	16
Adventures (1000 tours) MPC oem / reg	17/25
Aegis Guardian of Fleet	49
Aircraft Encyclopedia DOS	25
Amazing Universe	39
American Alive Tour Guide WIN oem / reg	15/45
American in Space MPC	19
American Heritage Dictionary	35
Animal Alphabet MPC	18
Aponge Companion	12
Asia Alive Tour Guide WIN	15
Audubon's Birds MPC, MAC	14
Audubon's Mammal MPC, MAC	14
Auto Map Road Atlas WIN	49
Auto Registration 94' WIN, MAC	16
Battle Chess Multi.Enhanved MPC, MAC	19
Battle Isle II	44
B.B.S. Explosion vol.2	16
Beethoven's 5th Symphony	19
Better Home & Gardening WIN, MAC	39
Beauty and the Beast MPC	13
Bicycle Collection DOS	33
Blue Force	23
Body Works 3.0 MPC	39
Body Works Voyage	39
Bug Adventure DOS, WIN	47
Business CD Rom	16
Business Master (shareware)	13
Business Phonebook 93'-94' DOS	15
Butterflies of the World MPC	18
Busy Town (age 3 - 7) DOS	29
California & Hawaii Travel + Golf Pk	*(29)
Capital Hill	13
Cardshop Plus WIN	19
Castle II DOS	49
CD CADD 3.7	22
CD Deluxe Pack 4 (atlas, chess, typing)	19
CD Game Pack II (10 games)	16
CD Power Box / CD Windows Box	12/12
Challenge Pack (9 games)	16
Chaos Continum MPC	15
Chef Ware DOS, WIN	29
Chess Master 4000 Turbo + Life Dealth MPC	16
City 2000	22
Classic Adventure (4 titles)	*(15)
Classic Air Battles (4 titles)	*(15)
Classic Collection (audubon's birds + mammals + shakespeare + sherlock holmes)	19
Color It MAC	17
Commanche Maximum Overkill DOS	59
Commanche w. 100 Mission (new)	35
Complete House MPC	15
Complete Windows Set	17
Compton's Family Choice	15
Compton's Interactive Encyclopedia WIN	29.50
Compton's New Century Reference MPC	24
Companion for OS/2	15
Conan - The Cimmerian	17
Conspiracy	22
Cowboy Casino MPC	38
Creepy Crawlies	18
Cruise for a Corpse	19.99
Current Shareware 94' DOS, WIN	23
Cute 'n' Cuddies	18
Cyber Race	15
Cyberplasm Formula	16
Daemonsgate	29
Dark Seed	17
Day of the Tentacle	19
Deep Voyage MPC, MAC	17
Deluxe Game Pack (4 on 1)	15
Dessert Storm MPC, MAC	12
Destination Mars Year 2010	*(15)
Dictionary of the Living World MPC	16
Diggers DOS	39
Digital Cinema WIN	19
Dinosaur Safari MPC	17
Distant Suns 2.0 WIN	78
Doctor's Book of Home Remedies WIN, MAC	16
Dominator	18
Doom + Mania	18
Dracula Unleashed	26
Dragon's Lair DOS	39
Dragon Sphere DOS	*(29)
Dr. Bob 1001 Games	19
Dune	23
Education Master (shareware)	12
Educational Disk	17
Eric the Unready DOS	23
Europe Alive Tour Guide WIN	15
Everywhere USA Travel (2CD) WIN	35
Eye of the Beholder	19.99
F-15 Strike Eagle III DOS	12
F-19 Stealth Fighter	19.99
Falcon Gold + 4 Add On	57
Family Doctor III MPC, MAC	17
Family Education Collection DOS	12
Family Zoo Animal Encyclopedia MPC	15
Fatty Bear : Birthday Party DOS	*(15)
Fatty Bear : Fun Pack DOS	*(15)
Font Elegant DOS	12
Fractal Ecstacy MPC	29
Frontier Elite II	37
Full Bloom PC, MAC	17
Gabriel Knight : Sins of the Fathers MPC	19
Games 94'	22
Global Explorer (DeLORME) MPC	59
Gold Medallion Games	18
Goldilocks and Three Bears oem	19
G.O.R.G. DOS	27
Great Cities I & II	15
Great Literature (1896 books) DOS, MAC	39
Great Wonders of the World	17
Greatest Book Collection DOS, WIN	34
Green Environment	15
Grolier's Encyclopedia 6.0 MPC/ MAC	35/45
Grooves	18
Guiness Disc of Records 93' MPC / MAC	17/19
Guiness Disc of Records 94'	36
Gunship 2000 oem / reg	19/29
Gus Goes to Cybertown MPC, MAC	15
Halo Desktop Imager WIN	17
Harpoon	19.99
Health and Medical Phones	14
Healthy Cooking MPC, MAC	15
Hell Cab WIN	44
History of the World PC & MAC	47
Holy Bible DOS	16
Home Meidcal Advisor Prof.	49
Home Sweet Home	29
Horde DOS	39
How Things Grow	16
How to Create Multimedia	22
Hypmotic Harp MPC	16
Image of NASA	16
INCA DOS	17
Indiana JOnes : Atlantis	*(19)
Info Magic : CICA for Windows	19
Info Magic : InterNet Tools	19
Info Magic : Linux 2CD	14

*(price) .... special , while supplies last

^^ Title .... we are authorized dealer of it

Info Magic : Source Code	18
Innocent Until Caught	29
Iron Helix MPC	19
Jack Nicklaus Signature Edition (golf)	22
Japanese for Business WIN, MAC	125
Jazz of Multimedia History oem / reg MPC	22/35
J.F.K. Assassination	37
Jones in the Fast Lane MPC	13
Journeyman Project MPC	*(36)45
Jump Raven	39.99
Jurassic Park Screen Saver oem / reg	14/29
Jutland DOS	23
Kid's Zoo + Under Sea	19
Kid Works 2 WIN, MAC	36
King James Bible DOS	22
King's Quest V / VI DOS	12/19
Kodak Photo CD Access (oem) WIN	11
Land of the Lore WIN	39
Languages of the World WIN	15
Last Chance to See WIN	38
Last Dinosaur Egg MPC	16
Lawnmower Man oem / reg DOS	19/*(39)
Learn to Speak Spanish/ Eng/ Fren PC, MAC	52
Learn to Speak Spanish v4.0 PC, MAC	79
Learning Heaven	12.50
Legend of Kyrandia	19
Lenny's Music Toons	32
Leisure Larry 1	19.99
Leisure Larry 6 DOS	44
Lifestyle CD 4-pk	29
Links Golf Challenge	19.99
Loom DOS	13
Lords of Rings oem / reg DOS	25/49
Lost in Time (video) DOS	24
Lucas Games MAC	22
Lunicus	42
M-1 Tank Platoon	19.99
MacMillian Dictionary for Children (age 7-12)	17
Macromedia Action! WIN	19
Mad Dog McCree I / II	19/39
Magic Death	15
Mammals (national geographic) DOS	17
Man Enough	25
Mantis Experimental Flighter DOS	13
Mantis Fighter + Civilization Combo	18
Map Expert v.2 WIN	285
Mario Early Years (age 2-6)	18
Mario is Missing - Deluxe	15
Mathematic Library (highschool)	12
Mavis Beacon Teaches Typing MPC	15
Mayo Clinic: Family Pharmacist	49
Mayo Clinic: Health Book MPC / MAC	15/19
Mayo Clinic: The Total Heart MPC / MAC	38/39
Me, Myself & I	29
Mega Fortress	19.99
Mega Race DOS	*(19)
Microcosm oem / reg	17/49
Microprose F117A	29
Microprose Gamepack of 4 DOS, MAC	19
Melting Pot	12
Might and Magic: World of Xeen	39
Mighty Morphin Power Ranger	26
Mod Blaster	23
Monarch Notes DOS, MAC	39
Monkey Island DOS	15
Monster Disk II (2 CD, shareware)	29
Monster Media 93'	19
Movie Select (paramont)	34
Mozart (music)	14
Musical Instruments of Symphony MPC	15
Music Monster DOS	17
National Parks USA MPC, MAC	18
Nature Graphics DOS	15
Nautilus BackPac I / II / III WIN	*(39/39/39)
Nautilus Mini Subscription	24
New View for Space WIN	17
Newsweek Interactive DOS	19
Nikko - Elephant Adventure (age 2-7)	16
Night Owl v.12 (shareware)	25
Night Owl Graphic / Game	19/15
No.11 Downing Street WIN	28
Nomad DOS	36
Ocena Below MPC, MAC	15
Operation Neptune Math (age 9-14)	39
OS/2 Box	17
Outpost	39.99
Oxford English Reference Library OS/2, DOS	95
Parenting DOS	17
PC Library	19
PC Media (diagnostic)	19
PC SIG Library vol.12 / vol.13	12/17
Peter and the Wolf MPC	13
Phoenix 5.0 Shareware	15
Phone Disk USA 94' - business DOS, MAC	48
Phone Disk USA 94' - residential	49
Phone Disk USA 94' - bus + res	79

Phone Disk USA 94' - power finder (reverse)	145
Picture Atlas of the World DOS	65
Pinacotheca (pintura classical painting) MPC	13
Pirates	19.99
Playing with Language MPC	17
Police Quest I	19.99
Prehistoria (Grolier) MPC	19
President	22
Printshop Deluxe CD Pack	79
Pro Phone: Direct Phone (bus + res)	79
Pro Phone: Free Phone (toll free #)	25
Pro Phone: Select Phone (reverse)	149
Proto Star	23
Publisher's Paradise	19
Putt Putt: Going to the Moon oem / reg	19/45
Putt Putt: Joins The Parade oem / reg	15/45
Putt Putt: Junior Adventure oem / reg	15/28
Quick & Easy Spanish	19
Quicktoons MAC, PC	17
Reader Rabbit 1 Deluxe (age 3-6)	43
Red Storm Rising + F117A	24
Redshift WIN	49
Reefer Madness (movie)	*(15)
Reference Library DOS	15
Resource Multimedia	19
Return To The Moon WIN oem / reg	18/29
Return To Zork DOS	19
Richard Scarry's Best Neighborhood Ever	32
Richard Scarry's Busiest Neighborhood Ever.	32
Rick Rabbit ABC (age 2-5)	19
Ring World	23
Road Scholar: Trivia Game WIN, MAC	39
Rodney Fun Screen	17
Romaterial (moon valley) WIN	25
Sea Wolf	47
Sea Worthy (2 in 1)	24
Secret Weapons of the Luftwaffe DOS	15
Science Adventure II DOS, WIN	46
Sci-Fi Fantasy	19
Shadow Caster	45
Shareware To The Max	14
Sherlock Holmes I for MAC / III for MPC	19/49
Silent Service II DOS	44
Sim City 2000 oem	29
Sim City Enhanced DOS	49
Simtel MS DOS 2 pk	*(15)
Sleeping Beauty MPC	15
Smart Photo CD	13
So Much Shareware IV	17
So Much Space	17
So Much Windows & OS/2	15
Software Jukebox Arcade DOS	34
Software Vault Emerald WIN	*(15)
Software Vault Platinum Collection WIN	*(12)
Solar Heaven	12
Sounds 9000	19
Space Adventure + Dinosaur Adventure	19
Space Hulk	36
Space Quest IV - Roger Wilgo oem	15
Space Shuttle MPC	15
Spear of Destiny (mission II & III) DOS	44
Spirit of Excalibur	17
Sports Best (3 in 1) DOS	15
Sports Illustrated	17
Star Trek: 25th Anniversary oem / reg.	25/55
Star Trek Collection	19
Star Trek Original TV / Next Generation	29/29
Star War Chess MPC	19
Star War Rebel Assault	46
Stellar 7	13
Story Book Maker	35
Straight From Heaven	15
Street Atlas 2.0 (DeLORME)	89
Super Clipart	12
Super Arcade Game	17
Super Programmer	17
Supersonic oem / reg.	19/46
Syndicate Plus	45
Tempra Access Photo CD Plus	15
T.F.X. Flight Simulator	54
The Adventure of Willy Beamish	14
The Animals MPC / MAC	14/19
The Best of Photography (Nautilus)	39
The Dagger of Amonia	24
The Labyrinth of Time	49
The Material World of Professor Piccolo	49
The Pillbook (medical)	29
Think and Talk Spanish (Fren/ Italian/ Ger)	99
Timetable of History - Science	17
Top 50 Games DOS / WIN	22/24
Total Baseball	15
Travel Companion	19
Triple Play (English/ French/ Spanish)	39
Tuneland MPC	45
UFO WIN	24
Ultima VIII (w. speech pk) DOS	49

Ultimate Trivia	22
Under A Killing Moon	59
US History DOS, MAC	15
Vampire Coffin MPC	16
Video Cube - Space MPC	25
Vivaldi: The Four Seasons MPC	25
Voyage To The Planets 1 / 2 / 3	45/45/45
Voyage To The Stars 1 / 2 / 3 / 4	39/39/39/39
Whales and Dolphins MPC	18
Who Shot Johnny Rock DOS	39
Wild Cat Gold	18
Wild Places DOS, MAC	11
Windows 94'	22
Windows Gamer	19
Windows Master	14
Wing Commander Deluxe II	35
Who Kill Sam Rupert	17
Wolf 3D Mania	13
Wolfeinstein 3D + Blade Stone	16
Women On Wheels	23
World Circuit Simulator	18
World Fact Book	17
World View DOS, MAC	11
World of Software 3-pk	29
Wrath of the Demon DOS	17
Zillion Sound	18

CD BUNDLE

5 foot 10 Pack 29.50
invludes - Animation Festival ; Best of Media Clips
- CD Rom of CD Rom
- Doom ; King of Quest
- PC Karaoke ; Stellar 7
- Time: Man of the Year
- World Atlas ; World Fact Book

Treasure Pack I 35
includes - CD Fun House ; Clip Art Novice
- Font Pro ; Gallery of Dreams
- Newsbytes ; Photo Pro vol.3 ; vol.6
- Quicktoons ; Supertoons
- Washington Times & Insight 94'

CD-i (impact)

Sigma Design : Reel Magic Lite Card 299
Titles (call for details) .... 24.99 ea.
- Black Rain - Bryan Adams
- Eric Clapton - Indicent Proposal

ADULT Titles

3D Beauties	17.95
3D Darlings	26.95
101 Sex Position #1 / #2	32.95/33.95
Adult Movie Almanac	43.95
Adult Reference Library	29.95
Adult Talate 2	27.95
Adult XXX Teaser	9.95
^^ Affair vol.1	25.95
After Dark Trilogy (3 movies)	19.95
All Beauties	19.95
American Girls #1 / #2	29.95/29.95
Ammateur Models II	25.95
Amorous Asian Girls	35.95
Art of Picking Gilrs	29.95
Asian Palate (interactive)	29.95
Assain Hot Pic's	17.95
Assian & Invasion	29.95
^^ Attraction MPC	25.95
Babies Got Butt	29.95
Barlow Affairs	36.95
Beveley Hills 90269	27.95
Beveley Hills Billy	25.95
Best of Best vol.1 - Erotic Encounters	25.95
Best of Best vol.2 - Girls on Girls	25.95
Best of Best vol.3 - Hot & Nasty Amateurs	25.95
Best of Best vol.4 - Deep Tush	25.95
Best of Digital xtc	29.95
Best of Vivid Girls	34.95
Big Bust	24.95
Big Town	29.95
Blonde Justice	24.95
Bodavious Beauties	32.95
Bra Bustin	23.95
Bustin Out	34.95
Busty Baby vol.2	27.95
Cafe Flesh	24.95
Camp Double DD	29.95
CDX-94-95 Calendar Soft / Hard	25.95/25.95
CD Brothel	29.95
CD Rom Collectable	22.95
Centerfold & Covergirl	25.95
Come Play With Me (interactive)	29.95
^^ Cool Girl MPC	25.95
Coven	26.95
Cream de la Cream	25.95
Curse of Cat Women	24.95
Dangeous Blonds	23.95
Debbie Does Dallas	25.95
Deep Throat / Deep Throat Girls	24.95/27.95

Digital Dancing (interactive)	33.95
Digital Delight	26.95
Digital Dream v.1 / v.2	22.95/24.95
^^ Dinner Party MPC	25.95
Dirty Debutantes	32.95
Dirty Laundry	29.95
Dirty Talk	21.95
Doors of Passion	25.95
Dream Machine (interactive)	44.95
Expose	27.95
Extreme Delight	19.95
Face (interactive)	27.95
Fantasies	27.95
Fisherman's Wife	27.95
Flame	25.95
G.I.F.s That Keep On Giffing	24.95
Girls Doing Girls I	23.95
Girls From Big East	29.95
Girls, Girls, Girls	27.95
Girls of Vivid 1	22.95
Graduation from F.U. (interactive)	27.95
Group Theraphy (interactive)	27.95
Hidden Agenda	29.95
Hidden Obsession	29.95
Hot Pic's 1 / 3 / 4 / 5	21.95 ea.
House of Dreams	24.95
House of Sleeping Beauty	29.95
Indiscretion (interactive)	27.95
Infomo	31.95
Insatiable	25.95
La femme Venus	34.95
LA Stripper	28.95
Ladies Club	27.95
Legend of Overfiend (cartoon)	29.95
Legends of Porn vol.2	24.95
Loads of Fun	*(19.95)
Main Street	27.95
Man Power	19.95
Mark	24.95
Married Women	29.95
Massive Melons	29.95
Models Momoirs	29.95
Murphy's Brown	27.95
My First Time	25.95
Mystique of the Orient	29.95
New Machine Adult Sampler	9.95
New Wave Hooker	24.95
Night Watch (interative)	29.95
Northern Delights	34.95
Nova Collection I / II / III	21.95/21.95/21.95
Oriented Express	24.95
Over Exposed	45.95
Pandora	26.95
Pinch of Pepper	22.95
Pixis Sampler	9.95
Plumbers Don't Wear Tie (comedy)	17.95
Princess of Persia	29.95
Priority Male	19.95

- Power Source Series :
  - Gifs and Video titles .... 9.95 ea.
  - Cartoon Fantasy
  - Crowberry (video)
  - Enjoyable Flighters (video)
  - Henpecking (video)
  - Insatiable Woman
  - La Traviata (Extreme Heat / Hot Shwareware)
  - Men's Club (video)
  - Movies For The Night (video)
  - Obessions
  - Oriental v.1, v.2, v.3
  - Petty Baby
  - Pink Ladiies
  - Sakura
  - Sweet Summer (video)
  - Taboo 94' (video)
  - Under 17
- MPEG Movie titles .... 10.95 ea.
  - Beach Girls
  - Bllue (hooters)
  - Happy Time
  - Obessions
  - Pearl (china doll)

Public Fantasy	26.95
Rain Woman	39.95
Recquel Released	29.95
Rimfire Pacific Video (clip art)	15.95
Scissors & Stone (interactive)	38.95
Secrets	24.95
Secret Interactive	29.95
Seductions	24.95
Seymour Butts - Adventure (interactive)	39.95
Seymour Butts - Blowing Away	24.95
Seymour Butts - Deep Inside Share	24.95
Seymour Butts in Paradise	24.95
Seymour Butts On A Honeymoon	24.95
Sex	24.95

*(price) .... special , while supplies last

^^ Title .... we are authorized dealer of it

Sex Game	37.95
Sexiest Women	21.95
Sinfully Yours	29.95
Sizzle	19.95
Southern Beauty	29.95
Squirt City v.1	22.95
Super Model Go Wild	33.95
Super Smutware	24.95
Super Star of Porn	23.95
Surf's Up	19.95
Swimsuit & Lingeria	9.95
T & A To The Maxx	18.95
Temptation	19.95
The Devil In Miss Jones	25.95
The Maddams Family	36.96
^^ Thunder of Spring MPC	25.95
Too Naughty To Say No	37.95
Touch Me, Feel Me	29.95
Toys Not Boys	22.95
Traci, I love you	*(19.95)27.95
Virtual Vivid Sampler	8.95
Virgins 1	35.95
Wanda 2	24.95
Weekend At Ernies	29.95
Wicked Movie	39.95
Wicked Wiskers	34.95
Women who love Men & Men who love Women	27.95
X-Rated Bloppers	25.95
XXX Amateur Video	19.95

2. PC SOFTWARE

ADOBE

Illustrator 4.0 w. Streamline for Win	425
Photoshop 2.5 for Win oem / reg	295/515
- w. Illustrator 4.0	615
Premier 1.0 for Win	185
Streamline for Win	125
Type Manager 2.5 for Win	45

AUTODESK

AutoCAD Lite	429
Autosketch 2.0 for Win	209
Generic CADD 6.1	255
Home Series (home/ landscape/ kitchen+bath)	39

BORLAND

Brief 3.1 for DOs & OS/2	95
C++ Prof. 3.12 Application Framework (Edu.)	179
C++ Professional 4.0 for Win (16/32 bit)	335
- upgrade in FD or CD	185
dBase IV 2.0	*(455)
- upgrade	99
- compiler	195
ObjectVision Pro 2.1	*(199)
Office 2.0 (includes WP 6.0A) for Win	369
- upgrade	229
- competitive upgrade	275
Paradox 4.5 for Win	135
- w. Quattro Pro	155
Quattro Pro 5.0 Dos / for Win	45/45
Quattro Pro Workgroups Edition	*(175)
Sidekick for Win	29
Turbo C++ 3.0 Dos	75
Turbo C++ 3.1 for Win	99
Turbo C++ Visual Edition for Win	*(79)
Turbo Pascal 7.0	115
Turbo Pascal 1.5 for Win	109

CENTRAL POINT

Anti-Virus 1.2 for Win & Dos	39
Anti-Virus 2.0 Dos	*(49)
PC Tools 2.0 for Win	89
PC Tools Pro 9.0 Dos	*(79)

COREL

Corel Draw 2.5 for OS/2	135
Corel Draw 3.0 - FD / CD oem	129/49
Corel Draw 4.0 - CD	*(249)355
- upgrade fr 3.0 to 4.0 - FD / CD	215/*(135)
Corel Draw 5.0 - FD+CD / CD only	565/435
- upgrade fr 3.0 to 5.0 - FD+CD / CD only	419/325
- upgrade fr 4.0 to 5.0 - FD+CD / CD only	215/179
Corel Ventura 4.2 - FD + CD	*(124)175
- CD only	145

IBM

OS/2 for Win - FD	*(49.94)95
- CD version	*(39.95)
OS/2 2.11 - FD version	149
OS/2 2.11 - CD version	135

INTUIT

Quicken 7.0 Dos	39.95
Quicken 3.0 for Win	39.95
QuickBook 2.0 for Win	95
QuickPay 3.0 for Win & Dos	49
QuicBook & QuickPay for Win	125

LOTUS

1-2-3 5.0 for Win	299
- upgrade	99
1-2-3 4.0 Dos	365
- upgrade	99
Ami Pro 3.01 for Win	259
- upgrade	65
- competitive upgrade	99
Approach 2.1 for Win	*(99)239
cc:Mail 10-user License	359
cc:Mail Desktop 2.03 for Win	*(65)
cc:Mail Group Pack for Win w. Organizer	595
cc:Mail Mobile E-Mail 2.0 for Win	135
- upgrade	75
cc:Mail Router 5.1	*(199)225
Freelance Graphic 2.01 for Win	325
- upgrade for Win / for Dos	99/99
Improv	*(95)
Notes Starter Pack 3.0	850
Organizer 1.1	*(75)95
Smart Suite 2.1	*(399)425
- upgrade	*(265)285

MICROGRAFX

ABC Flowcharter 3.0	315
Designer 4.0	*(425)
- competitive upgrade	*(185)
Graphics Works for Win	175
- competitive upgrade	85
Picture Publisher 4.0 for Win	399
- competitive upgrade	189
Windows Draw 3.0	49
- Value Pack	49

MICROSOFT

Access 2.0 for Win	299
- competitive upgrade	119
Arcade Games for Win	27
Greative Writer (age 8-14)	*(39.95)
Dos 6.22	46
- upgrade	49.50
Entertainment Pack for Win 1 / 2 / 3 / 4	28
Excel 5.0 for Win	294
- upgrade	89
- competitive upgrade	119
Fine Artist (age 8-14)	*(39.95)
Flight Simulator 5.0	39.95
- New York Scenery	28
- Paris Scenery	28
- SF Scenery (by Mallard)	29
Fortran 5.1 Compiler	155
Fortran Powerstation	339
- upgrade	195
- competitive upgrade	245
Fortran Powerstation 32 upgrade to NT	275
Fox Pro 2.6 Single Dos or Win	*(95)
Fox Pro 2.6 Professional	449
- upgrade	285
Golf Course	19.95
Macro Assembler 6.11 (MASM)	155
- upgrade	79
Mail Server 3.2 (10-user)	445
Money 3.0 for Win	26
Multimedia Viewer - CD	315
Office 4.2 for Win - FD / CD	455/459
- competitive upgrade	275
Office Professional 4.3	545
- competitive upgrade	355
Power Point 4.0	315
- competitive upgrade	125
Profit for Win	129
Projet 4.0 for Win	419
- upgrade	145
Publisher 2.0 for Win	89
Scenes Screen Saver	23
Software Development Kit	239
Sound System + Windows 3.1	*(125)
Sound System 2.0 for Win	149
- software only	49
Test 2.0 for Win	315
- upgrade	99
The Best of Entertainment Pack	23
True Type Font Pack 1 / Font Pack 2	45/46
Visual Baisc 3.0 for Win - Standard	129
Visual Baisc Professional 3.0 for Win	299
- competitive upgrade	189
Visual C++ Standard	79
Visual C++ Professional 1.5 (w. MFC2.5, OLE2)	
- CD version	369
- upgrade	99
Visual C++ 1.5 for Win 16/32 bit - CD	485
- upgrade	195
Visual C++ for Windows NT	*(375)
- upgrade	98
Visual Control Pack	99
Windows 3.11	54
- upgrade	49.95
Windows NT 3.1 for Win & OS/2	265
Windows NT Advanced Server	925
Windows Printing System	99
Windows for Workgroups (reg. version)	135
- oem version in 5.25" FD / 3.5" FD	63/65
- Workgroups Add On 3.11 for Win	49
- Workgroups Add On 3.11 MS-DOS	52
Windows Workgroups 3.11 + Dos 6.21	99.95
Word 6.0 Dos	299
- upgrade	99
Word 6.0 for Win	295
- competitive upgrade	119
Works 3.0 Dos	99
Works 3.0 for Win oem / reg	59/89

QUARTERDECK

DesqView 386 2.6	95
DesqView/X 1.2	165
DesqView/X Network Manager (TCP/IP)	129
Qemm 7.03	59
- upgrade	39.50

SANTA CRUZ OPERATION

Software titles	ca;;

SYMANTEC

ACT! 2.0 for Win	179
C++ Professional	319
- upgrade	189
Enterprise Developer competitive upgrade	259
Norton Anti-Virus 3.0 for Win & Dos	85
Norton Commander 4.0	69
Norton Desktop 3.0 for Win	112
Norton Speed Drive (speeds Win, DOs, CD)	69
Norton Utilities 8.0	109
- competitive upgrade	95
On Target for Win	89
PC Anywhere 5.0 Remote & Host Dos	115
- v1.0 for Win	119
PC Anywhere Lan Complete	385
Q & A 4.0 Dos	239
Q & A for Win	*(165)
Q & A Write (word processing)	49

WORDPERFECT

Wordperfect 5.2 for OS/2	*(199)
Wordperfect 6.0 Dos	285
- upgrade	95
- Educational Offer	95
Wordperfect 6.0a for Win	*(255)295
- upgrade & competitive upgrade	99
- Education Offer + Quattro Pro	125
WP + Paradox + Quattro (Borland Office)	369
- upgrade	229
- competitive upgrade	275
WP Office 4.0a for Win - server	185
- Client 5 pk	299

OTHERS

After Dark Screen Saver	*(24.95)29
- More After Dark	*(23.95)29
ALDUS	
- Freehand 3.1 for Win	379
- Pagemaker 5.0 for Win	499
-- upgrade	145
-- w. Photostyler 2.0	649
- Persuasion 2.1 for Win	325
- Photostyler 2.0 for Win oem / reg	295/355
Be Our Guest (game)	15
Boot Con 2.0	49
By Design for Win	59
CAERE	
- Fax and Find for Win	155
- Omni Page Direct OCR 2.0	95
- Omni Page Professional 5.0 for Win	445
CA Clipper 5.2	479
- upgrade	115
CA Simply Accounting Dos / for Win	69/69
Cakewalk Professional 2.0 for Win	225
Calendar Creator Plus	35
Canvas for Win	265
- competitive trade up	99
Carbon Copy 6.1 Guest & Host Dos	*(95)
Carbon Copy 2.5 for Win	*(115)
Check-It Pro Analyst for Win	*(59)85
Check-It Pro vol.1 & vol.2	85
Check-It Plus 3.0	85
Claris Works for Win	69
Comm Works for Win (Laplink V)	125
DacEasy Accounting 4.4	95
Dash Board 2.0 for Win (by HP)	49
Design CAD 2D 7.0 for Win	179
Direct Access 5.1 Dos	65
- v1.0 for Win	29
Disney Screen Saver	27.95
Eclipse Fax 1.2 for Win / w. OCR	69/79
Energizer Bunny Screen Saver	*(9)15
F-14 Fleet Defender (game)	49.50
FastBack Plus 6.0 Dos / for Win	85/89
File Maker Pro 2.1 for Win	*(115)
Floor Plan Plus 3D	83
- upgrade	47
Font Minder for Win	55
Fractal Dabbler	55
Fractal Design Painter 2.0 for Win	259
- X2 for Win	88
FrameMaker 4.0 for Win	549
FTP: PC/TCP Dos / for Win	345/345
Grammitik V Dos / for Win	57/59
Harvard Graphics 2.0 for Win	245
- upgrade	85
Harvard Graphics 3.06 Dos	*(325)
Hijaak 2.1 Dos	89
- v2.0 for Win	85
Idealisher 4.0	99
IIT XtraDrive 3.0 (dta compression)	65
Intermission Screen Saver	29
Johnny Castaway Screen Antics	*(9)19
Kai's Power Tools 2.0 for Win	*(99)115
Kid CAD	29
Kid Pix 2 for Win	38
Kodak PhotoEdge CD	89
Kodak Shoebox Image for Win	*(95)
Laplink V	105
- upgrade	55
Laplink V Netware	*9125)145
Mac-in-Dos for Win	99
Mac-in-Dos Plus	139
Managing Your Money for Win	19.95
One Write Plus Accounting & Payroll	49
Passport Encore 3.0	365
Photo Morph for Win	*(69)79
Power Basic	95
Power Japanese 2.0 for Win - FD / CD	195/199
Power Search (file manager)	*(25)39
Printshop Deluxe 1.2 for Win	49
- for Business	27
Procomm Plus 2.1 Dos	89
- v2.0 for Win	119
QA Plus 4.7 Dos / for Win	85/89
Quark X Press 3.3 for Win	599
Qualitas 386 Max 7.0	*(59)
Sherlock for Win (filing & retrieval)	85
SpinRite 3.1	79
Soft Windows (for Power Mac)	*(295)
Stacker 4.0	95
- upgrade	55
Stacker for OS/2	129
StageSoft Accounting	125
- w. Payroll	159
- Lan version	*(255)
Star Trek Screen saver	*(19.50)
Tie Fighter (game)	45
Time Slip 5.0 Dos	*(99)169
- for Win	189
Turbo CAD 3.0 w. free 500 drawing symbols	85
- Professional version for Win	219
T-Value 3.0 (interests, loan)	59
Uninstaller 2.0 for Win (microhelp)	45
Vista Pro 3.0	69
Visio 2.0 for Win	*(125)199
Visio Express Forms Office	49
Watcom C++ v.10 16/32 bit	189
Wave 2.0 for Win (ny Turtle Beach)	75
Win Comm Pro	*(75)
- w. Winfax Pro	125
Winfax Pro 4.0	79
WinLynx	*(45)79
WinSense (windows optimizer)	49
Winsleuth Gold Plus	59
Wordscan 3.0 (by Calera)	169
- Wordscan Plus	*(399)
Wordstar 2.0 for Win	39
XTree Gold 3.0	95
XTree 1.5 for Win	69

*(price) .... special , while supplies last

^^ Title .... we are authorized dealer of it

MULTIMEDIA 101

Pop Music Meets Multimedia

Jaundiced Reflections On The Purple One, And More

Pop music has significantly influenced the cultural tenor of the times for at least the past forty years or so, and it's an open question whether multimedia has any hope of such influence—although that is, of course, exactly the aspiration of so many. Music is by its very nature interactive—even the mere consumption of pop music has significant communal interactive aspects—but it is likewise also linear. Music is almost certainly the oldest art form; it's done just fine for many years and is continually evolving in different directions.

By what hubris does the digital revolution hope to improve upon it? In fact, music is what may improve the digital revolution.

Pop music is already substantially a digital medium, operates in a multimedia manner, and is so far ahead of the computer world in both interactive and media terms that the subject is laughably ironic.

The essence of a pop-music experience is that it's short, it's repeatable, it's pleasantly ephemeral, and it's broadcastable. In the music world, there's a great deal of redundancy; in other words, a "hit" is supported by thousands of also-rans; this, along with the ephemerality, constantly allows new contenders to emerge (similar to the computer world, but much faster!).

What we're looking for in musical multimedia is something that's short and repeatable, that can be broadcast or otherwise enjoyed by large audiences simultaneously and basically passively—and is enjoyed by large audiences, a claim the computer multimedia world would currently have difficulty substantiating for even its most successful products.

This mythical multimedia product would also have additional layers of interactivity that a user/consumer could enjoy either alone, with friends in a physically close situation, or remotely with friends via modem. What those additional layers look like or sound like is, of course, the big question. But equally importantly, it wouldn't be a matter of compiling the finite histories of old rock stars with a catalog; it would be fresh, and there'd be lots of it—every week!

BY JONATHAN E.

MultiMedia & beyond

CLICK HERE FOR HISTORY

My puzzling over these issues has a long history but recently received intense stimulus from the Prince (or whatever it is that he wants to be called) Interactive CD-ROM and the general drift of the Music & Multimedia U94 event, which did not convince me that there's much compelling stuff in the coming pre-Christmas wave of product.

As I wrote in this column in *MicroTimes* #124 a couple of months ago, there are apparently tons of coffee-table multimedia, collections of sound and video stuck together on a CD-ROM. That doesn't prevent a gushing downpour of hype about how we can "interact blah blah blah creatively" with the artist. All told, it was rather a dismal outlook, looking backwards at history rather than forward to new conceptual expressions from new artists.

CLICK HERE FOR PRINCE INTERACTIVE

Prince Interactive is a perfect example of the hype far outstripping the delivery.

Let's be nice for as long as possible: the music and videos are fine, being mostly a collection of his old tunes along with a few new numbers that, while not among his classic work, aren't too shabby. But the presentation *is* shabby, being a sort of cheap version of Purple Myst Xplora (and it's strange how work on Interactive began as work on those two projects was winding down). What you get to do is to click around what purports to be Prince's fantasy playground for the New Power Generation, discovering rooms, morphing objects, scantily clad females, a recording studio, a nightclub, a library, his boudoir, etc., etc. It's tedious beyond belief. It's pretentious beyond being a joke. The very few moments of amusement are far outweighed by the torture of finding them.

The fundamental problem is that the spatial metaphor only works when it's done extremely well, as in Myst. In Interactive, it gets in the way. Don't tell me it's "play" to mouse around when it's such a drag—I want instant access to the good stuff, as I have with a turntable or audio CD player. Furthermore, don't tell me I'm interacting with the artist when all I get is a choice of which song to listen to or extremely limited options in sound manipulation—four-track mixers to make my own version of a song are a joke, and a karaoke version of a song can be found on most any 12-inch single.

A product like Interactive attempts to channel your experience and restrict your options by imposing a limiting structure. This is an innate part of traditional artistic expression, and I have no problem with it in traditional settings without the Orwellian hype. But in this new setting, I expect my options to be at least as good as they are with traditional media. Interactive offers little worthwhile that I can't get with a DJ rig, a regular CD player, and a video deck. Interactive doesn't even capitalize on its digital nature by telling you that you can interact with its files by using original applications such as Premiere to open them. Ultimately, Interactive is a signpost to a dead-end street.

CLICK HERE FOR HOPE

Sunk in despair and aggravation that perhaps I was doomed to an endless diet of hype and unfulfilled expectations, I called Nancie S. Martin, president of Jouissance Productions, for a reality check. I looked to her as an expert in the field with her extensive background in music and magazines. Besides authoring four books on pop music, she's had stints as the editor-in-chief of both the teenybopper-oriented *Tiger Beat* and the somewhat more adult *Playgirl.* Since then she's ventured into the multimedia field as the project manager for Brilliant Media on Peter Gabriel's Xplora 1 CD-ROM. Martin's current projects are a pair of CD-ROMs for Compton's and Rhino Records on Atlantic's soul and rock music of the '60s.

HKG COMPUTERS
Hardware Knowledge Group, Inc.

$0 DOWN
90 DAYS SAME AS CASH
On Approval Of Credit
1 YEAR PARTS & LIFETIME WARRANTY!

INSTANT CREDIT!

Pentium Super Sale
- Pentium 60 VLB
- 256K Cache
- 8MB RAM
- Teac 1.44 MB Floppy Drive
- 420 MB Hard Drive
- 14" SVGA .28 NI Monitor
- S3 Accelerated Video
- 101 Keyboard
- VLB IDE (2HD + 2FD)
- I/O Ports (2S, 1P, 1G)
- Microsoft Compatible Mouse
- CPU Heat Sink + Fan
- Mini Tower Case

$1620
$1770 For 66MHz

PCI Pentium 60/66/90
- Intel Motherboard
- 256K Cache
- 8 MB RAM
- Teac 1.44 MB Floppy Drive
- 420 MB Hard Drive
- 14" SVGA .28 NI Monitor
- PCI 64-Bit Video
- 101 Keyboard
- PCI IDE (2HD + 2FD)
- I/O Ports (2S, 1P, 1G)
- Microsoft Compatible Mouse
- CPU Heat Sink + Fan
- Mini Tower Case

$1839/1999/2199

VLB 486DX2-A50/A66
- 256K Cache
- 4MB RAM
- Teac 1.44 MB Floppy Drive
- 420 MB Hard Drive
- 14" SVGA Monitor
- VLB SVGA 1M Video
- 101 Keyboard
- VLB IDE (2HD + 2FD)
- I/O Ports (2S, 1P, 1G)
- Microsoft Compatible Mouse
- CPU Heat Sink + Fan
- Mini Tower Case

$1059/1079

VLB 486DX-133/A40
- 256K Cache
- 4MB RAM
- Teac 1.44 MB Floppy Drive
- 210 MB Hard Drive
- 14" SVGA Monitor
- VLB SVGA 1M Video
- 101 Keyboard
- VLB IDE (2HD + 2FD)
- I/O Ports (2S, 1P, 1G)
- Microsoft Compatible Mouse
- CPU Heat Sink + Fan
- Mini Tower Case

$1019/959

VLB 486SX-125/133
- 256K Cache
- 4MB RAM
- Teac 1.44 MB Floppy Drive
- 210 MB Hard Drive
- 14" SVGA Monitor
- VLB SVGA 1M Video
- 101 Keyboard
- VLB IDE (2HD + 2FD)
- I/O Ports (2S, 1P, 1G)
- Microsoft Compatible Mouse
- Mini Tower Case

$859/879

PATRIOT 4000 MULTIMEDIA NOTEBOOK
- Built-In 16 Bit Sound Card
- Built-In Logitech Trackball
- 170 MB Hard Drive Disk
- 4 MB RAM (Expandable to 20MB)
- VESA Local Bus Video
- PCMCIA Type III Slot
- 64 Grey Scale Screen

$1599
DX-33

CPU	Mono	Dual Scan	Active
486SX25	$1429	$1929	$2969
486DX33	1599	2099	3149
486DX2/66	1649	2139	3189

MULTIMEDIA SPECIAL I
LOADED MULTIMEDIA
- **486DX2-66 VLB**
- **Mini-Tower Case**
- **256K Cache on Board**
- **4 MB of RAM**
- **210 MB Hard Disk**
- **14" SVGA Monitor .28mm**
- **1 MB SVGA Card VLB**
- **32 Bit VLB IDE+ I/O Card**
- **1.44 Floppy Drive**
- **Sound Blaster 16 Sound Card**
- **Double Speed CD-ROM Drive**
- **50 Watt Amplified Speakers**
- **Microsoft Compatible Mouse**
- **101 Keys Keyboard**
- **CPU Heat Sink & Fan**

$50 OFF CD-ROM TITLES

$1349

UPGRADE YOUR SYSTEM TODAY!
- **Free estimate**
- **Low cost alternative to high computing power**
- **All upgrades are backed by 1 year parts and labor warranty**

Monitors

14" SVGA .39dp	$189
14" SVGA .28dp	209
14" SVGA .28dp NI	229
15" Impression 5, Flat Scr	345
17" Impression 7, Flat Scr, Low Rad	689
14" ViewSonic 6E NI	295
17" ViewSonic 17G, Flat Scr, Low Rad	825

Video Cards

ISA Trident 512K/1MB	$36/55
VLB Cirrus Logic 1 MB	65
VLB Spider Plus 1 MB	99
VLB Diamond Stealth 1 MB	139
VLB Orchid Kelvin 1 MB	149

Modems & Tape BackUp

2400B Modem	$29
9600/2400 Fax Modem	39
14400/14400 Fax Modem Int	79
14400/14400 Fax Modem Ext	99
Colorado Tape Back-Up 250MB	165

Hard Drives

130 MB IDE	$169
210 MB IDE	175
270 MB IDE	195
340 MB IDE	235
420 MB IDE	229
540 MB IDE	315
1 GB IDE	599
OTHERS	CALL

Audio/CD-ROM

SoundBlaster Pro Value	$79
SoundBlaster 16 Basic	99
SoundBlaster 16 MCD	139
SoundBlaster 16 SCSI	149
Panasonic Double Speed CD-ROM	139
Mitsumi Double Speed CD-ROM	139
NEC 3X-Speed SCSI CD-ROM	349
50W Powered Speakers	39
80W Powered Speakers	59

Printers.........Call

Multimedia PCI Pentium 90
- **Intel Motherboard**
- **256K Cache**
- **8MB RAM**
- **Teac 1.44 Floppy Drive**
- **420 MB Hard Drive**
- **15" SVGA .28 NI Monitor**
- **PCI SVGA 2MB Video**
- **SoundBlaster 16 Basic**
- **Panasonic 2X CD-ROM**
- **50W Powered Speakers**
- **101 Keyboard**
- **PCI IDE (2HD + 2FD)**
- **I/O Ports (2S, 1P)**
- **Microsoft Compatible Mouse**
- **CPU Heat Sink + Fan**
- **Mini Tower Case**

$50 OFF CD-ROM TITLES

$2599

MULTIMEDIA SPECIAL II
VLB Multimedia System
- **486DX-40 VLB**
- **256K Cache**
- **CPU Heat Sink & Fan**
- **Mini Tower Case**
- **4 MB of Main Memory**
- **210 MB Hard Drive**
- **14" SVGA Color Monitor**
- **VLB SVGA Card 1 MB**
- **VLB IDE (2HD, 2FD) Controller**
- **I/O (2S, 1P, 1G Ports)**
- **1.44 MB Floppy Drive**
- **16 Bit Sound Card**
- **Double Speed CD-ROM Drive**
- **Pair Of Magnetic Shielded Speakers**
- **Microsoft Compatible Mouse**
- **101 Keyboard**

$20 OFFCD-ROM TITLES

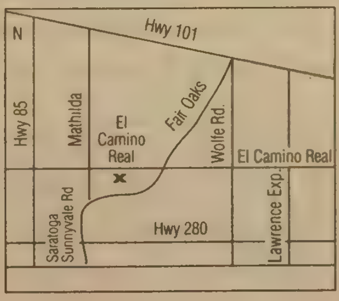
$1149

HKG COMPUTERS
Hardware Knowledge Group, Inc.

M-F: 10am-7pm
Sat: 10am-7pm
Sun: Closed
Corporate PO's Welcome

448-EAST EL CAMINO REAL
SUNNYVALE, CA 94087
(408)-SEEK-HKG (733-5454)
Fax: (408)733-5456

DISCOVER MasterCard Prices Subject To Change w/o Notice VISA



Martin is refreshingly free of hype and does not make grandiose claims for these CD-ROMs, which are basically Red Book audio collections of some of the classic tunes of the era, along with expanded liner notes on a Mac/MPC hybrid data track. These expanded liner notes include the multimedia elements of video clips and an 8-bit version of the complete song as well as substantial text about the artists with a history, a discography, and fun facts. It's not the future, and thankfully there's no spatial metaphor to wander around in. There's a common navigational scheme for all the songs, allowing you to access the various features. Each song has its own graphic design by an individual artist, interpreting the mood of the song, but it's equally important that the designs invite you in to read the background information.

Martin is a great believer in the value of text, saying, "I'd like to see more text incorporated into interactive product because I think that it's important to keep people reading. I think that the act of reading, the symbolic processing, is something that you can't do any other way." Jouissance's office even has a reference copy of Roland Barthes' *The Pleasure of Text*, and particular attention is being paid to the way text is handled in these CD-ROMs with the layout being done in QuarkXPress. However, Martin jokingly refers to them as "the party CD-ROMs you can dance to."

We had a wide-ranging conversation on what might be the future of music as regards interactive multimedia. Her point of view is that it might be a long time before a significant new cultural direction develops. Martin agrees with the perception that music is already successfully interactive: "All of us can feel music. Music is interactive; it has been since cave men were drumming around the fire. We love to dance to it. We like to turn it up. We like to drive while music is playing. Music is a soundtrack, but music is also something you can be a part of, like music for slam dancing, music for moshing, music for whatever it is. Music for ballroom dancing, for that matter. In that

You get to click around what purports to be Prince's fantasy playground for the New Power Generation, discovering rooms, morphing objects, scantily clad females, a recording studio, a nightclub, a library, his boudoir, etc., etc. It's tedious beyond belief.

All the benefits of *MicroTimes* without newsprint on your fingers.

Introducing *MicroTimes* online with Mercury Center.

Mercury Center/Online and *MicroTimes* invite your participation in a ground-breaking new service that directly links *MicroTimes* readers with our editorial and advertising.

If you've got a computer and modem, try *Mercury Center* with 10 hours of free connect time by calling 408-297-8495 Monday-Friday 7 am to 7 pm; or Saturday and Sunday, 8 am to 2 pm.

If you're already an *America Online* member, tap into *Mercury Center* at no additional cost. Simply type the keyword "Mercury," click on the business icon and follow the menu to *MicroTimes*. Then it's up to you to choose editorial or advertising...it's all in there! Plus, your *Mercury Center* membership gives you access to the most timely news, information, and services online technology can bring you.

MicroTimes: where you want it when you want it.

Try Mercury Center for 10 hours risk-*FREE*

Try Mercury Center risk-free for one month–up to 10 hours free. If you decide to cancel your subscription, there's no cost or obligation.

Mail or Fax this form to:

Mercury Center
San Jose Mercury News
750 Ridder Park Drive
San Jose, CA 95190
Phone: (408) 297-8495
Fax: (408) 271-3718

Version: ☐ Mac ☐ DOS ☐ Windows
For DOS and Windows, please also tell us:
Disk Size: ☐ 3.5 ☐ 5.25
Density: ☐ High ☐ Low

Mercury Center requires Macintosh or PC-compatible computer, modem, mouse, and a hard disk.

Name:____________________
Address:____________________
City:__________ State:_____ Zip:_____
Daytime phone:____________________

BAM ACCESS TO MARKETS · BAM MEDIA
Mercury Center Online on America Online
MICROTIMES

Positive Solution Computer, Inc.

DBA PS Computer

Multi-Media On Display
Let Us Repair or Upgrade Your System!

Pentium PCI/VLB 512K 16MB, 1GB, Viewsonic 15 EX

- Super Micro Motherboard (Made in USA) 4 PCI, 2 VLB
- **512K** Ext. Cache & CPU Cooling Fan
- **16MB** RAM (Max 128MB)
- 1.2 MB & 1.44 MB Floppy Drive
- **1.08 GB Quantum** SCSI-2 Hard Drive
- **Adaptec 2940 PCI** fast SCSI-2 Controller
- **High Speed IO Card** (UART-16550)
- 1MB **Orchid Kelvin** PCI Graphic Card
- Mid Tower Case **with 2 Cooling Fans**
- 101 Keyboard (Keytronic or Chicony Click)
- MS Mouse or Logitech Mouseman
- 15" **ViewSonic 15** 1280x1024

90MHz $3399

66MHz $3199

60MHz $3064

Pentium PCI/VLB 512K 8MB, 540MB, Viewsonic 15 EX

- Super Micro Motherboard (Made in USA) 4 PCI, 2 VLB
- **512K** Ext. Cache & CPU Cooling Fan
- **8MB** RAM (Max 128MB)
- 1.2 MB & 1.44 MB Floppy Drive
- **540MB Conner** IDE Hard Drive
- VLB HD Controller
- **High Speed IO Card** (UART-16550)
- 1MB **Orchid Kelvin** PCI Graphic Card
- Mid Tower Case **with 2 Cooling Fans**
- 101 Keyboard (Keytronic or Chicony Click)
- MS Mouse or Logitech Mouseman
- 15" **ViewSonic 15EX** 1024x768
- .28 MPR-2 Green Monitor

90MHz $2579

66MHz $2379

60MHz $2244

486 VESA Local Bus 8MB, 540HD, SVGA NI

- ASUS Motherboard (includes ZIF socket) w/256K
- 8MB RAM (70ns) exp. to 64MB; 72 Pins
- 540MB Conner Hard Drive (3.8ms)
- 1.2MB 5.25" and 1.44MB 3.5" Floppy Drives
- 32-Bit IDE VESA LB Controller
- 2 Serial, 1 Parallel, and 1 Game Ports
- 1MB 32-bit Cirrus Logic VESA Local Bus SVGA Card w/Hi-Speed Chipset
- Medium Tower w/Power Supply
- 101 Enhanced KeyTronic or Chicony Click Keyboard
- MS Mouse or Logitech Mouseman
- 14" Proton 1280x1024, .28 SVGA Non-Int Full Screen Monitor w/72Hz Refresh Rate
- CPU Cooling Fan
- 7 Year Labor Warranty, 1 Year Parts

INTEL [illegible] $1519

486 VESA Local Bus 4MB, 420MB, SVGA NI

- 4MB RAM (70ns) exp. to 32MB
- 420MB Conner Hard Drive (10.6ms)
- 1.2MB 5.25" and 1.44MB 3.5" Floppy Drive
- 32-Bit IDE VESA LB Controller
- 2 Serial, 1 Parallel, and 1 Game Ports
- 1MB 32-Bit Cirrus Logic VESA LB SVGA Card w/Hi-Speed Chipset
- Mini Tower or Desktop Case w/ Power Supply
- 101 Mitsumi Enhanced Keyboard
- Logitech Dexxa Mouse
- 14" Proton 1280x1024 .28 SVGA Non-Int Full Screen Monitor w/72Hz refresh rate
- CPU Cooling Fan (w/DX System)
- 7 Year Labor Warranty, 1 Year Parts

INTEL [illegible] $1189

INTEL 486SX-33 4MB, 210HD, SVGA NI

- 128K Cache
- 4MB RAM (70ns) exp. to 32MB
- 210MB Conner Hard Drive
- 1.2MB 5.25" and 1.44MB 3.5" Floppy Drive
- 32-Bit IDE VESA LB Controller
- 1MB 32-Bit Cirrus Logic VESA LB SVGA Card w/Hi-Speed Chipset
- 2 Serial, 1 Parallel, and 1 Game Ports
- Mini Tower or Desktop Case w/ Power Supply
- 101 Mitsumi Enhanced Keyboard
- Logitech Dexxa Mouse
- 14" Proton 1280x1024 .28 AVGA Non-Int Full Screen Monitor w/72Hz refresh rate

$929

MultiMedia Specials

Mitsumi 001D Double Speed CD-ROM

(250ms, 350KB/s, w/Card)

$139

Media Magic True 16-Bit Sound Card

MicroSoft Sound System on Board

(Softwares are more friendly, compare to Sound Blaster 16)

$69

Sound Blaster

Compatible Sound Card

$39

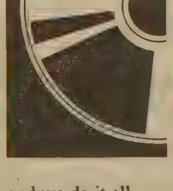
Amplified Speakers

80Watt	120Watt
$59	$69

We produce CD Titles!

More than 150 Kinds on Demo! Distributors or OEM are Welcome!

Make Your Own CD



You bring in the data and we do it all
- Up to 650MB of disk memory
- Complete professional output
- Additional CD-Services available

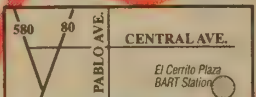
ONLY $250

Call for Volume Pricing

SPECIALS

Promise DC4030 LV-2 IDE VESA Cache Controller (Support 4HD/2FD, 2.88MB, 16MB Cache)	$114
Proton 14" 1280x1024, 28 SVGA Non-Interlaced Monitor	239
9600 FAX/2400 Modem w/Bit FAX for Windows	39
14,400 FAX/14,400 Modem	69
28,000 Modem/14.400 FAX	144
Mini Tower w/200 Watt Power Supply	45
Medium Tower w/230 Watt Power Supply	59
Full Tower w/250 Watt Power Supply	79
Super Tower w/300 Watt Power Supply, 2 fans	165
Desktop Case w/200 Watt Power Supply	55
Logitech Dexxa Mouse	15
Logitech Mouseman	35
Logitech Mouseman (BUS Ver)	60
Logitech Trackman	69
Big Trackball	25

10032 San Pablo Ave.
El Cerrito, CA 94530
TEL. (510) 527-6908



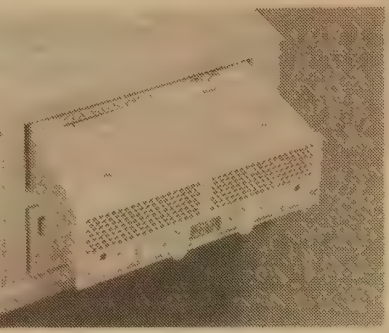
VISA
COD
MasterCard

OPEN 6 DAYS
Mon-Sat: 9:30am to 6pm
FAX (510) 527-3823

You Can Count on Our Best Price and Qualified Service! • 7 Years Labor & 1 Year Parts Warranty!

MULTIMEDIA AUDIO

TWIN SOUND - Slip-In Stereo Speaker



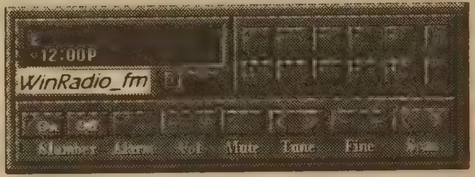
- Fits any unused 5 1/4" PC drive bay
- 100% shielded high quality speakers
- Works with all sound cards & CD-ROMs
- No messy desktops
- FCC Class B certified

"...Twin Sound has to be one of the most practical and intelligent PC hardware products....in a long time. This is a wonderful product whose time has come." (PC Review Oct/Nov 1993)

"Editors' Pick for Business Audio." (New Media Magazine April 1993)

Super Deal both for $89 (Plus $6.95 S&H)

WinRadio_fm



View of Control Panel in Windows

- Plug-in digital FM Radio Card
- Runs under Windows and DOS
- 10 Preset Channels
- Auto Scan/Fine Tuning
- Wake-up and Sleep Functions

TO ORDER CALL:
1-800-832-7070
VISA & MASTERCARDS OK
Each sold separately at $54.95
CA. residents add 8.25% tax

Dealers Welcomed
EMail Orders:
smtct@ix.netcom.com
(Internet)
74643.2415@Compuserve.com
(Compuserve)

SOUND MiNDS
Technology Inc.
Ph: (408) 374-7070 Fax: (408) 374-7193

Walnut Creek CDROM
4041 Pike Lane,
Suite D-452
Concord, CA 94520
1-800-786-9907
1-510-674-0783
Fax: 1-510-674-0821
orders@cdrom.com

All Our Discs Are Unconditionally Guaranteed!!!

Your Best CDROMs!

Cica MS Windows CDROM	4000 new Windows programs - quarterly updates	$ 29.95*
Giga Games CDROM	3000 hot Games for MSDOS and Windows	$ 39.95*
Space and Astronomy CDROM	Thousands of NASA images and data files	$ 39.95*
C User Group Library CDROM	A collection of user supported C source code	$ 49.95*
Simtel MSDOS CDROM	Classic: 650 MB Shareware / Freeware for MSDOS	$ 29.95*
QRZ! Ham Radio CDROM	FCC Callsign Database for Win & DOS + files	$ 29.95*
Gifs Galore CDROM	5000 mostly 640x480 GIF Images in every catagory	$ 39.95*
Gutenberg Project CDROM	Classic Literature and historical documents	$ 39.95
Hobbes OS/2 CDROM	600 MB always current Shareware/Freeware for OS/2	$ 29.95*
Source Code CDROM	650 MB of Unix & DOS source code for programmers	$ 39.95*
Internet Info CDROM	Thousands of computer, net, and internet documents	$ 39.95
X11/GNU CDROM	X Windows and GNU software for Unix and SPARC	$ 39.95
Aminet Amiga CDROM	650 MB new Shareware/Freeware for Amiga	$ 29.95*
GEMini ATARI CDROM	650 MB 3000 Programs for Atari - also for BBS use.	$ 39.95*
Ada CDROM	Programming tools, Ada source code and docs	$ 39.95*
Nova for NeXT CDROM	600 MB black NeXT app's, src., docs, etc	$ 59.95*
Nebula for NeXTSTEP Intel	600 MB NeXTSTEP Intel app's, docs, etc	$ 59.95*
Garbo MSDOS/Mac CDROM	MSDOS and Macintosh Shareware/Freeware	$ 29.95*
Fractal Frenzy CDROM	2000 high resolution fractals - royalty free	$ 39.95
FreeBSD CDROM	Berkeley BSD. 32bit O/S for PC, w/ GNU & X11. Src	$ 39.95
Linux CDROM	Yggdrasil Linux. 32bit O/S for PC, w/ GNU & X11. Src	$ 49.95
La Coleccion CDROM	MSDOS, OS/2, Windows. Spanish descriptions	$ 39.95*
Sprite CDROM	Berkeley's experimental Distributed OS for Sun's	$ 29.95
CDROM Caddies	Standard type, highest quality, Lifetime guarantee!	$ 4.95

*Shareware programs require separate payment to authors if found useful.

Kodak Photo CD™

PROFESSIONAL SCANNER HAS ARRIVED!

MEDIUM/LARGE FORMAT

- 4 x 5 - 2 ¼ - 35 mm
- Six levels of resolution
- File size up to 72 MB, 30-35 Image Pacs per CD-ROM
- Up to 4,000 x 6,000 pixels
- Storage cost 3 cents per MB*
- Compare with SyQuest storage cost of more than $1 per MB

*CD-ROM included with 10 or more scans

ALPHA CD IMAGING
675 Menlo Avenue
Menlo Park, CA 94025-4700
Call: 1-800-453-2988 or 415-325-4877
Fax: 415-325-4911
Photo CD™

way it's interactive because we feel it and we have a reaction, we do stuff to it."

She puts her finger on the issue that arises again and again in discussion: "But we don't always know how to translate that. Somebody who's a fine ballroom dancer can translate their appreciation of the music into steps and can make that look beautiful—but we can't all do that." This is the problem Todd Rundgren is referring to when he talks about "the bogus myth of instant creativity." However, Martin can see a role for an intermediary: "I think that what talented visual artists can do, what multimedia artists, for want of a better term, can do, is to translate the experience of music, is to be interpreters. What you as the user get the benefit of is of both experiencing the music yourself and also seeing someone else's interpretation of it."

In these early days, Martin emphasizes that "artists need good collaborators in just the same way that they found video directors that understand the medium and can work with it. They wouldn't consider going to the recording studio without a recording engineer. Why would they consider going into a multimedia studio and not having somebody to work with them?"

However, she also believes that "if an artist is going to participate in the creation of an original CD-ROM, then he or she is going to have to learn what this medium can do in the same way they've learned what they can do in the recording studio, in the same way as people in the last ten or fifteen years have learned what they can do in the video suite. Some people have very consciously avoided learning what they can do with videos. In consequence their videos are pretty much a camera and some guys playing, and there's some girl in lingerie. They haven't really put themselves out there. But the artists who have—Peter Gabriel or R.E.M.—who've said, 'I want to learn what I can do with this,' their videos are pretty damn good. They've applied themselves and they've done good things with it and I think the same thing will happen with multimedia."

Which almost brings us back to Jon Carroll's remark about the diminished importance of rebellion and the elevation of imagination. Let's just say that there's still plenty of imagination needed for the replacement of the music industry with a digital form of interactivity. Click here to start. ■

Copyright © 1994 by Jonathan E. All rights reserved.

PC WORLD #1 "BEST BUY"

November 1993, January & February 1994

The *NETiS N433VL* and *N4D266VL* systems are ranked #1 and #2 respectively in the PC World's Top 20 PC list, February 1994.

"Service and support are decent, with responsive, accurate tech support ... (*NETiS N433VL*) with reasonable performance and feautres that should last a few years."

- PC World February 1994

OS 2 Ready!

MICROSOFT® WINDOWS READY-TO-RUN

MICROSOFT® WINDOWS NT™

"The *NETiS N4D266VL*'s fine performance, low price, and super support make it the hands-down winner for top overall Best Buy"

- PC World January 1994

"The Best Buy system from *NETiS* Technology represents a remarkable combination of low price and high performance."

- PC World November 1993

NETiS 486VL BEST BUY

- ☐ Intel 486 CPU
- ☐ 4MB memory, 128KB cache
- ☐ 3 VL-Bus (VESA Local Bus) slots
- ☐ Pentinum-ready ZIF socket
- ☐ 210MB hard drive
- ☐ 32-bit VL-bus IDE controller
- ☐ 1.2MB or 1.44MB TEAC floppy drive
- ☐ Genoa VL-Bus Graphics with 1MB
- ☐ 14" SVGA color monitor, .28mm
- ☐ 2 serial/1 parallel/1 game port
- ☐ Logitech 2-button mouse w/pad
- ☐ MaxiSwitch NOVA 101 keybaord
- ☐ Desktop case with power supply

486DX-33	$1,060
486DX2-50	$1,085
486DX2-66	$1,120
486DX4-100	$CALL

OPTIONS for *486VL BEST BUY*:

8MB 70ns memory installed	Add $150
16MB 70ns memory installed	Add $460
Upgrade to 256K cache	Add $20
420MB/540 IDE hard drive	Add $60/130
Buslogic 410A Vl-Bus IDE kit, 0K	Add $160
ATI Ultra 32 VLB with 2MB	Add $150
Diamond Viper VLB with 2MB	Add $230
14" NI .28mm SVGA monitor	Add $30
15" non-interlaced SVGA monitor 72Hz	Add $110

COMMON OPTIONS:

MS DOS 6.2x/Windows 3.11	$45/$55
14,400 bps internal fax modem	$58
28,800 bps internal fax modem	$175
USR 14,400 internal fax modem	$118
Colorado 250MB tape backup drive	$145
Logitech mouseman serial /bus	$38/$42
Microsoft Serial 2.0 mouse	$28
Full /Middle tower case	Add $50/$20
Northgate OMNI/Ultra keyboard	$75/$95
High speed serial port (16550 UART)	$28
SoundBlaster 16 Basic	$94
SoundBlaster 16 MultiCD/SCSI-2	$118/168
Media Vision Pro Audio Spectrum/Studio	$99/139
Mitsumi CD-ROM (double speed)	$129
NEC CDR-510 3X SCSI CD-ROM	$328
Plextor Multi-spin/Quad-speed SCSI CD-ROM	$265/499
Toshiba 3401B double speed SCSI CD-ROM	$315
Multi-Media Family kit Double-Speed CD-ROM, SoundBlaster16 Basic, 40watt speakers and 6 CD titles	$360

Free software installation with system purchase

Monthly Specials

HP35470GBSCSI Tape drive	$789
VESA SVGA w/1MB	$70
9600/2400 internal fax/modem	$35

Quantity Limited to Stocks on Hand

PCI Power Stations

- ☐ Advanced PCI Local bus motherboard
- ☐ 4 PCI local bus slots and 5 ISA slots
- ☐ 8MB memory, 256K cache, ZIF socket
- ☐ 420MB hard drive
- ☐ PCI IDE Controller
- ☐ Both 1.2MB & 1.44MB TEAC floppy drives
- ☐ Genoa PCI graphics accelerator w/2MB
- ☐ 15" non-interlaced .28mm SVGA color monitor with LCD display (1280x1024)
- ☐ 2 serial/1 parallel/1 game port
- ☐ Logitech 2- button mouse w/pad
- ☐ MaxiSwitch NOVA 101 keyboard
- ☐ Desktop case with power supply

Pentium 60	$1,999
Pentium 66	$2,140
Pentium 90	$2,395

Options for *PCI Power Stations*

16MB memory	Add $320
540MB/1GB IDE hard drive	Add $75/330
540MB/1GB SCSI hard drive	Add $95/450
ATI Ultra Pro PCI with 2MB	Add $60
Diamond Viper PCI with /2MB	Add $140
Graphics accelerator exp. to 4MB	Call
PCI SCSI controller	Add $50
Adaptec 2940 PCI SCSI-II ctr. kit	Add $260
Buslogic 946C fast SCSI-II ctr. kit	Add $235
17" NI, low emission .26 monitor	Add $330

NEC Authorized Reseller

IBM VAE RESELLER

Hewlett Packard VAR

Low Cost Internet Connectivity For Small Businesses

Novell Certified NetWare Engineer

Novell Gold Authorized Reseller™

- Networking hardware/software
- Network design, installation & trainning
- Turnkey solution/system integration
- One-stop solution for small businesses
- Top-notch expertise/support in Novell NetWare, Novell UnixWare, Windows NT, SCO UNIX/ODT, Lantastics & TCP/IP Networking

NETWORK SOLUTIONS:

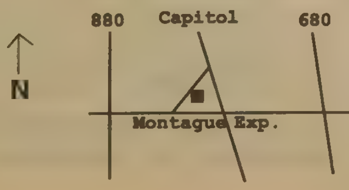
- File/Print Server
- NetWare/UNIX Connectivity
- Internet E-Mail Gateway
- Backup Server
- FAX Server
- CDROM Server

BEST VALUES

16-bit Ethernet card (BNC or 10BaseT)	$35
16-bit Combo Ethernet card	$42
9-port 10BaseT Ethernet hub	$170
12-port 10BaseT Ethernet hub	$300
12-port Ethernet SNMP hub	$995
12-port 10BaseT intelligent hub w/SNMP	$1,080

TERMS AND CONDITIONS

- 1 year warranty on parts and labor
- Life time technical support
- 48-hour system burn-in
- Prices/specification subject to change
- Not responsible for typos
- Prices reflect cash discount



NETiS Technology, Inc.

1606 Centre Pointe Drive, Milpitas CA 95035

Tel: (408)263-0368 **Fax:(408)263-4624**
E-mail: Sales@netistech.com

Hours: 8AM-6PM (Mon-Fri), 10AM-4PM(Sat)

Gulch Gossip

By Jonathan E.

No one wants to talk about it, but it seems as though the lawyers are doing the necrophilia thing to **Ebook**. Why else lay off everybody who worked there while the company is sold? That's no way to keep your wetware assets happy. ... Meanwhile, **Cathy McDermott** has moved on to consultant status and is handling the PR for the **Lollapalooza** tour's **Electric Carnival**, a "tent-based" (I love that!) multimedia environment with fifty Macs and PowerPCs networked and featuring some lively sounding ideas from **AVX**. With **Frankenface** you can digitize your face and try on different ages and genders, change your race, or have virtual tattoos or body piercings. "Look, Ma! no needles!" **Babymaker** is an extension of phone sex, simulating the facial features of any offspring you might spawn with your virtual mate. Exhibitionists can really get off by displaying the results on a giant screen. I'll bet that **Lisa Marie** and **Michael** would find either of these applications useful. The socially redeeming factor to all this is that "the essential idea is to explore issues of ethnicity, gender, age, and self-image," according to **Greg Deocampo**, cofounder of AVX and previously **CoSA AfterEffects**. If you just want to have fun, the **Emergency Broadcast Network** will be there with the **EBN Video Control System**, which lets you run EBN videomusic from a piano-style keyboard. There's little point in telling you that Lollapalooza is at Shoreline on August 27 and 28 'cos it's sold out. However, you could make your own versions of these entertainments by using **AVX Imp**, the development tool behind the scenes. For further details, call McDermott at (415)365-6885.

▼ ▼ ▼ ▼ ▼

That's the current generation of multimedia. **Randall Packer** of **New Music Theatre** claims that **John Cage** was the father of multimedia (and that **Wagner** was the grandfather!). Cage integrated electronics with music, dance, and the visual arts, creating the forerunner of performance art and staging the first happenings as early as the '40s. He collaborated both with composers such as **Stockhausen** and **Boulez** and scientists such as **Max Matthews** of **Bell Labs**. Besides his experimental use of electronics in a live setting, his aesthetic sense paved the way for the multilayered, collaged styles of the '90s. This year's **Percussion Currents** is the third annual celebration of Cage's legacy, opening with a performance by tabla maestro **Zakir Hussain** on September 2 and closing with a performance by techno-juju mavens **D'Cückoo** on September 4. In between is the **John Cage Interactive MusiCircus**, an eight-hour event with a twenty-hour intermission and multiple terrabytes worth of performers including **Pamela Z**, **Amy X Neuburg**, **Michael Peppe**, and the **BodySynth** with **Chris Van Raalte** inside. That's not all—everybody who enters the labyrinthine space will actually be a performer, carrying out individual instructions to trigger sounds or operate a computer at specific times. This directed interactivity was designed using chance techniques to decide on the particular action—and I guess there's further chance provided by how many of you actually show up and whether you follow your instructions. The first part of the MusiCircus is at 1 pm on September 3, and the second is at the same time on September 4. There's also an Electronic Percussion and Multimedia concert in the evening of September 3 and two drum circles, lead by **Arthur Hull**, at 12 and 5 pm on September 4. All events take place at various venues in Fort Mason. For details or tickets, call (415)282-0924.

▼ ▼ ▼ ▼ ▼

For another look at electronic, multimedia art, check out **Pedro Meyer's Truths & Fictions** exhibition at the **Mexican Museum**, also in Fort Mason. Meyer is a PC artist in both senses of the term, expressing a politically correct view of contemporary social conditions and using a personal computer to make that expression. There are a few prints from his earlier work, **I Photograph to Remember**, along with a computer to look at that CD-ROM, but most of the exhibition is his newer work of altered and straight photography as well as two computers to check out the Truths & Fictions CD-ROM, published by **Voyager**. The prints are superb, printed from the digitized art by an IRIS ink-jet printer on

Now, Compaq Authorized Sales and Service

SBT Accounting Systems Authorized Dealer

Small Business Accountant
complete system $695

VisionPoint

* System Manager	$195
* General Ledger	$695
* Accounts Receivable	$695
* Other modules available	

Modifications to suit your needs available. Source code included.

Novell Authorized Reseller

Netware V3.12 10 User	**$1399**
Netware V3.12 25 User	**$2129**
Netware V4.01 25 User	**$2899**

SCO AUTHORIZED RESELLER

UNIX OS V4.2 (2 user)	**$429**
UNIX OS V4.2 (16 user)	**$885**
Open Desktop Lite	**$696**
Global Access	**$748**

ADOBE

Photoshop / Illustrator	$654
Fontfolio (suggested retail)	$14,000

IBM

PS Valuepoint P-60 424 MB HD16 MB
PCI/ISA 1.44- FD SVGA L-Bus $3329

Compaq File Server

ProLiant 1000 5/60 Pentium
80 MB RAM
Tower Case with 300 watt PS
32 bit Fast SCSI-2 controller
1.44 Floppy drive
2.1 GB Pluggable SCSI 2 HD
On board SVGA controller
CDROM
Video Graphics Mono Monitor
32 bit NetFlex-2 Ethernet
Mouse

$14,888

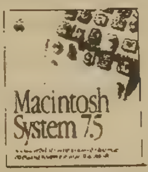
Compaq Workstation

Deskpro XE 466486 DX2-66
8 MB RAM
Desktop Case, Engy Effic PS
1.44 Floppy Drive
270 MB Hard Disk
15" SVGA NI Monitor
Parallel, Serial, Mouse ports
Audio Input and Output
Ethernet TP & AUI
MS DOS, Windows, Sound
Mouse

$3066

Apple Quadra 630

Motorola 68040-33
4 MB RAM
1.44 Drive
SCSI Controller
250 MB Hard Disk
15" Color Display
On-board Video controller
2 serial ports
Appletalk port
Keyboard
System 7.1


Macintosh System 7.5

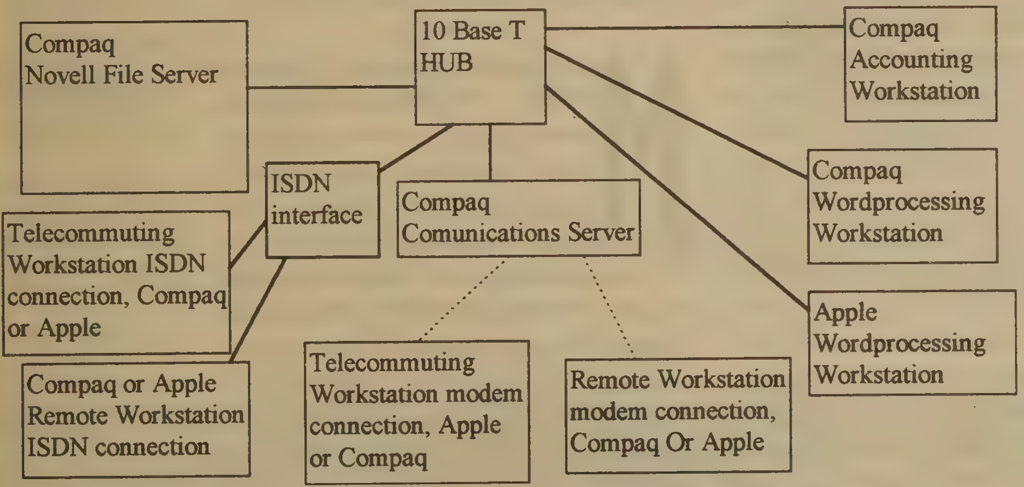
$1840

Apple Workstation

Power PC 6100/60
8 MB RAM
1.44 SuperDrive
160 MB Hard Disk
Audiovision 14" Display
Stereo Speakers
Microphone
AAUI Ethernet Adapter
ADB Mouse II
Apple II Keyboard
System 7.1

$2,599

Office Automation System


Compaq Novell File Server
10 Base T HUB
Compaq Accounting Workstation
ISDN interface
Compaq Comunications Server
Compaq Wordprocessing Workstation
Telecommuting Workstation ISDN connection, Compaq or Apple
Apple Wordprocessing Workstation
Compaq or Apple Remote Workstation ISDN connection
Telecommuting Workstation modem connection, Apple or Compaq
Remote Workstation modem connection, Compaq Or Apple

This system includes a variety of equipment as an example of some of the configurations possible. The workstations are Compaq or Macintosh systems or a combination of both. The connection to the remote workstations can be through a regular modem or use a high speed ISDN line. Using Microsoft Office the Compaq and Apple workstation can share working files.

Miracle Computers has been serving the Santa Clara Valley, California, and the greater San Francisco Bay area since 1985. Our clients for personal computer systems and components consist of corporations, universities, small businesses, individual users and the US government. All systems are custom configured to meet the needs of the user which may include Novell networks, Santa Cruz Operations UNIX and other networks and communication options. The sales and technical staff at Miracle Computers has expertise in network technology, data communications, test and measurement systems, computer internal operation, system engineering methodology and statistical process control and is qualified to implement systems using this technology. This staff is dedicated to providing technical support, computer and printer repair, upgrade service and vertical solutions.

MIRACLE COMPUTERS, INC. *SINCE 1985*

Corporate, Government & University P.O.s Welcome

For Orders Call:
1-800-446-9929 (Excluding 408, 415, 510 Area)

Prices Reflect C.O.D. Cash
M-F 9:00-5:30

780 MONTAGUE EXPWAY, SUITE 202
SAN JOSE, CA 95131

Prices subject to change

TEL: (408)435-8177
FAX: (408)435-8179

Gulch Gossip continued...

Arches paper and an unusual traditional Mexican paper with religious significance called *papel amate*, or "fig tree paper." Meyer's art is essentially that of a collagist using **Photoshop** and **Fractal Design Painter** to manipulate his images. It's often hard to tell the altered from the unaltered work, although some of the juxtapositions are a tad trite and obvious. Strangely, some of Meyer's unaltered photographs are the hardest to believe. Overall, his view of the United States is in black and white, caustic and one of spiritual poverty, while the pictures from the Mexican state of Oaxaca are in color, fancifully exuberant, and full of spiritual complexity. The exhibition is open Wednesdays through Sundays from 12 to 5 pm and runs until October 2.

▼ ▼ ▼ ▼ ▼

Wired is setting up to be more than just a "multimedia event on paper" and is soliciting material for its September launch of **HotWired**, a direct-to-the-Net, World Wide Web publication. In *Wired*'s own words, "Like television wasn't radio with pictures, the Net isn't magazines with buttons—or worse, video-on-demand. Instead, this is a new medium demanding new thinking, new content. We are looking for the best and brightest digital artists, correspondents, musicians, dreamers, and realists for HotWired. We have only one instruction to potential contributors: Amaze us! If you are doing amazing work, send us a brief written (plain text) synopsis:

- moving images—video or animation (QuickTime or MPEG)
  email: movies@hotwired.com
- still images—photographs, comics, original electronic art (GIF or JPEG)
  email: stills@hotwired.com
- music and sounds—samples, loops, songs, full orchestral works (AU or AIFF)
  email: sounds@hotwired.com
- writing—fiction, poetry, essays (ASCII, RTF, MS Word, or HTML)
  email: text@hotwired.com"

Remember don't send your actual files. *Wired* promises to pay for what it uses and to provide soothing rejection letters for what it doesn't. For further info, contact hotwired-info@hotwired.com .

▼ ▼ ▼ ▼ ▼

Around the corner from *Wired*, **MNI Interactive, Inc.** looks closer to the launch of its high-tech music information and entertainment interactive products for telephone, CD-ROM, and Interactive television with online ads for a network administrator, a writing/research assistant, a production manager, and a Windows programmer. Resumes to: (415)777-2851 (fax), busby@mni.com (email), or MNI Interactive, Inc., 501 Second Street, Suite 350, San Francisco, CA 94107 (regular mail).... Be warned that the competition is stiff; there's a lot of wannabes looking for work. A recent ad on the **WELL** for a writer for a multimedia product, with all the code words indicating that it wasn't a particularly well-paid gig, drew such a large response that after two days the word went out not to bother.

▼ ▼ ▼ ▼ ▼

So to beat the rush, try networking! **Last Saturdays** continues its incomprehensibly named series of gatherings beside the pool at the **Phoenix Hotel** on August 25. This time, it's a Thursday; when the events happen on a Saturday (and it's never the last one of the month), I always think Last is a typo for Lost. **Bob Ayres**, once of **The Other Cafe**, says that the name is meant to be amusing as are the meetings. "No name tags and no agenda" is the motto. Call (415)764-2967 for reservations or info.

▼ ▼ ▼ ▼ ▼

If you have a software product or multimedia title that you're interested in porting over to Japan, contact **Scot Campbell** at **CCIC Systems Pacifica**. He handled **Substance digizine**'s appearance there. Reach him at (510)845-5626. ... **Ladera Press** now has ***The Multimedia Law Book*** available on disk, including seventeen blank forms for licensing various forms of content and other legal needs of multimedia developers. The cost is a moderate $29.95 and can be ordered by phone from 1-800-523-3721 or by mail from 3130 Alpine Road, Suite 200-9002, Menlo Park, CA 94025. Specify Mac or IBM disk.

▼ ▼ ▼ ▼ ▼

Rumor control: The actual venture capital figure for **Pop Rocket** mentioned in the last column is about half of the figure reported and will mostly cover the bills already incurred instead of the marketing for **Total Distortion**, which as I said needs no marketing due to its "awesome wonderfulness." It looks as though the title will really, really, actually, finally ship in October. This is beginning to remind me of all the time it took ***Tommy*** to get out of **Pete Townshend**'s head and onto vinyl all those years ago. In the meantime, I got an advance cassette of the music and it's head-shredding stuff, quite unsuitable for small children or my One World Beat column, and I figure that Total Distortion may become the ***Spinal Tap*** of multimedia.

▼ ▼ ▼ ▼ ▼

SBD Productions (anybody know what SBD stands for?) has signed **Bobcat Goldthwaite** for the **How to Be Perfect** CD-ROM title. Currently, Goldthwaite and **Jay Leno** are in a cat fight and litigation over Goldthwaite setting the couch on fire when he appeared on the **Tonight Show**, with subsequent nasty allegations made about the state of Leno's marital bliss. Sounds perfectly showbiz to me. The claymation for the **Johnny Cocktails** title by London's **Hill Roberts Studio** looks great.

▼ ▼ ▼ ▼ ▼

Moving on, moving up: **J. Sterling Hutto** is "striking out to form a management consulting company to be known as 'Leverage,' focusing on information strategies, interactivity, and multimedia for large businesses." **vivid publishing, inc.**, the company Hutto cofounded in the summer of 1990, continues in the production and development field. Hutto can now be reached by phone at (415)512-9700, faxed at (415)512-9701, or emailed at sterling@lvrg.com . ... **Peter Samis** is the newly appointed program manager for interactive educational technologies and assistant curator of education for the **San Francisco Museum of Modern Art**. He was the art historian and content advisor for **Eden Interactive**'s highly regarded CD-ROM **American Visions: 20th Century Art From the Roy R. Neuberger Collection**. He was also the project director for **Wright Morris: Origin of the Species, a Digital Companion**, SFMOMA's first interactive multimedia title, currently on display at the Museum of Fine Arts in Boston. ■

Take Your Show on the Road !

Multimedia and Local Bus to go from COMPUTER LINK

Designed for Multimedia and Business Presentation

Intel DX4 Upgradable

Patriot-4000 Specifications:

CPU:	Intel* SL **Enhanced** 486SX-25, DX-33,DX2-66MH
MEMORY:	4MB (8MB, 16MB, 20MB or 32MB Optional) 8KB Built-in Burst **Cache**
BIOS:	1MB Flash ROM Programmable BIOS
Video:	**32-bit Local Bus** Windows Accelerator **1MB RAM** Support 1024x768 at 256 Colors
Display:	9.5" Non-Glare Upgradable LCD Panel
Drives:	Ultra Fast 2.5" 258MB Upgradable Hard Drive (344MB/520MB Optional) Super Slim 3.5" 1.44MB Removable Floppy Driv
PCMCIA:	2 x Type II Slots or 1 x Type III Slot
KeyBoard:	86-Key Reverse-T KeyBoard
TrackBall:	Extra-Large **25mm** Built-in TrackBall at Center
Audio:	Built-in **Audio** Chip, **Microphone** and **Speaker** MS Sound System & Sound Blaster Compatible
Ports:	1xS, 1xP, 1xExt. SVGA, 1xExt. KeyBoard Ports 1 x 160-Pin **Local Bus** Docking Station Port 1xLine-in, 1xLine-out, & 1xMicrophone Jacks
Power:	Rechargeable Ni-CaD or Ni-MH Battery 2.5-Hr to 5.0-Hr with **"Double Life"** Technology Auto-Switching AC/DC Adaptor 1.5-Hour Fast Battery Charge

PATRIOT 4000 MULTIMEDIA

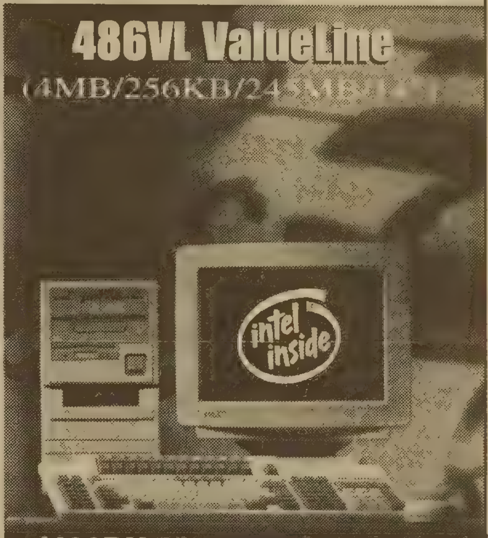
intel inside
SL Enhanced

Mono Display	Dual Scan Color	Active Color
$1649 486DX/33MHz SL	**$2195** 486DX/33MHz SL	**$3295** 486DX/33MHz SL

VESA-4000 Specifications:

- Intel 486SX-25/33, DX-33/66MHz
- **9.5" Viewable Screen Size**
- 128KB Flash ROM BIOS
- Fast **128KB External Cache**
- Fast 32-Bit **VL-Bus Display**
- 4MB RAM (Exp. 8, 12 ,16 or 20MB)
- 120MB HDD (170/25/340/520MB)
- Built-in 3.5" 1.44MB Floppy Drive
- Simultaneous External CRT Display
- Built-in 16mm **TrackBall**
- **2 PCMCIA** Type II Slots or 1 Type III
- 1 S, 1 P, PS/2, Ext. SVGA Ports
- 2HRS to 4HRS Battery Life
- Carrying case & AC/DC Adaptor
- Optional Docking Station(Call for Best Price)

Mono Display	Dual Scan Color	Active Color
$1625 486DX/33MHz	**$2095** 486DX/33MHz	**$2995** 486DX/33MHz

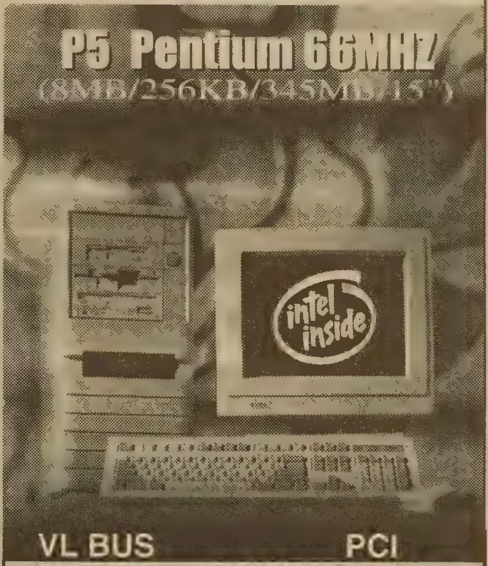


486VL ValueLine

(4MB/256KB/245MB/14"

i486DX-33 **i486DX2-66**

CALL



P5 Pentium 66MHZ

(8MB/256KB/345MB/15")

VL BUS **PCI**

CALL

Computer Link......
your link to technology.

- Leading Technology, Best Quality and Lowest Price Available.
- Knowledgeable Sales and Professional Service.
- One Year Parts and Labor Warranty
- Life Time Technical Support
- 30 Day Compatibility Money Back Guarantee
- Custom Configuration Available
- Support Local Area Network

P.O.'s WELCOME VISA MasterCard AMERICAN EXPRESS

Hours: M-F 9-6
SAT 10-5

ComputerLINK

24 Shattuck Ave. Berkeley, Ca 94704 Tel: (510)540-8283 Fax (510)540-8285

1-800-938-8283

No surcharge for VISA, MasterCard and American Express. We accept government, educational and corporate purchase orders. Prices and specifications are subject to change without All items are subject to availability. We are not responsible for errors in typography or photography. The Intel 486, Intel inside logo and Pentium™ are trademarks of Intel Corporation. All brands and product names are trademarks or registered trademarks of their respective companies.

Amiga User Profile:

Jim Carey

Animation Master Discusses The Tools

Since meeting Jim Carey a few years ago, I've often been puzzled by the range of work he does: producer, editor, animator... Carey is unique, a jack of all trades and an amateur at none. He has worked on everything from low-budget industrial videos to very high-end commercials.

His current projects include some of the graphics for the Emmy-nominated Saturday morning cartoon *Where in the World Is Carmen Sandiego? Carmen,* based on the Brøderbund software series, is a slick blend of traditional cartoon, 3-D, and short computer animations. Carey, along with David Kahn (producer), Kent Butterworth (storyboards and characters), and Mike Kast (co-animator), handles the latter. He refers to it as "animated image processing," a computerized takeoff from the cut-and-paste Monty Python style of animation.

I had a chance to talk with Carey at his place in Westlake, California, and look at some of his current work.

How do you put animations together?

The animation itself is in 256 colors. But then this animation is 256 and the next animation is 256, so I would use ADPro [ASDG] to bridge them together. Of course when you're using ADPro you're in 24 bits, so there's three different elements coming together. Because I had the luxury of going a frame at a time and compositing at the last minute to an Exabyte drive, I could do my transitions in 24-bit in ADPro.

For instance, I would have a 24-bit background and I would have two or three animations, each with its own 256-color palette, and the ARexx script would throw it together.

How do you know it came out OK?

I do check-animations back off the drive. In the beginning I would do a lot more testing because I was unsure of the format. Out of all that animation, we had maybe two or three bad frames. That's just amazing.

BY DOUGLAS J. NAKAKIHARA

SEVENTH ANNUAL

MultiMedia Expo

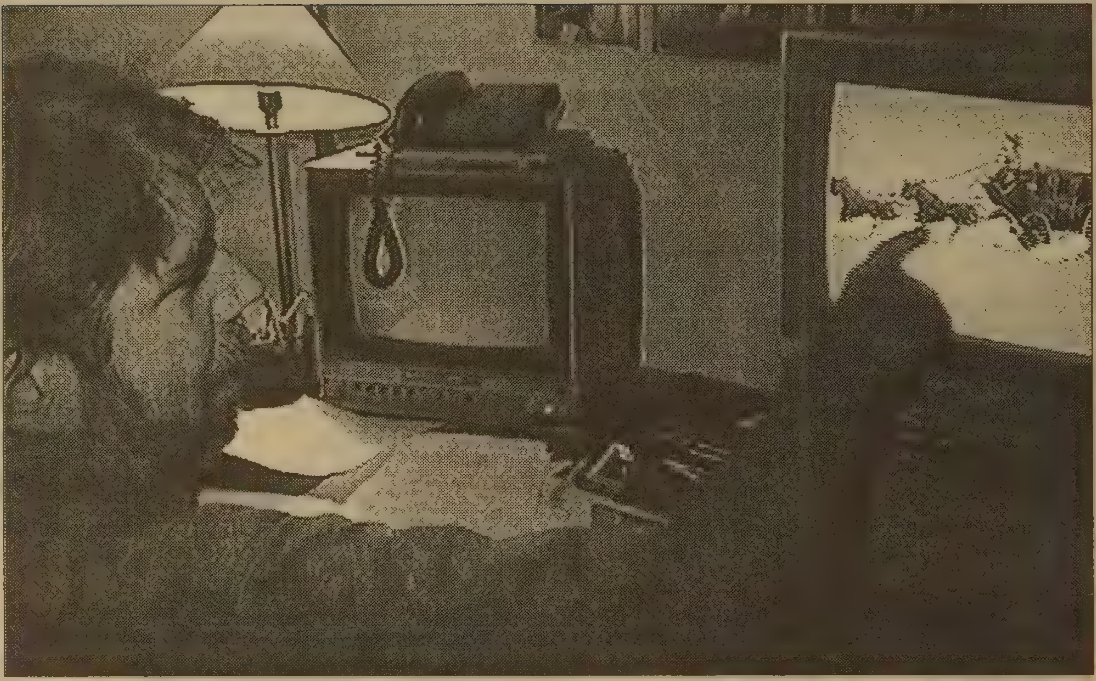
Sponsored by American Expositions Inc., Multimedia Development Group (MDG)
& IICS International Interactive Communications Society

San Francisco Center Of The Universe

Digital
San Francisco

October 11-13, 1994 • Moscone Center • San Francisco

American Expositions, Inc. • 110 Greene St., #703, New York, NY 10012 • 212-226-4141



So basically you did a lot of stuff in 256-color independently and just composited it in ADPro.

Right. Especially if I have a real nice background where I'd want to keep the color fidelity as high as possible. This background is 24-bit because it had such a nice gradient, this Wolfgang Mozart piece. Little Mozart, the second character, and the piano were a single 256-color DeluxePaint [Electronic Arts] animation. So with ADPro I would just take the background and composite the animation frames over it.

I had to get this one [another animation] done fairly quickly, so I just maximized one 256-color palette. I would take a look at all of the characters necessary and I'd assign a certain range in the palette for characters' costumes, and a certain other range for the background, and another range for the cutout of the heads. But even though it's just 8-bit, you still have a wide enough range of colors. Especially with dithering—random dithering—you see all of the rest of the characters come in using just 256 colors.

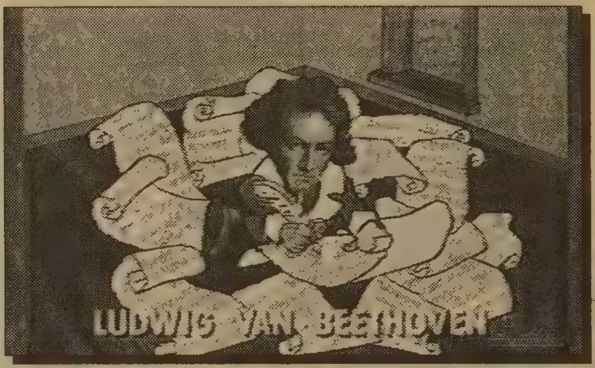
You really don't have that much disk capacity. How do you store all of this stuff?

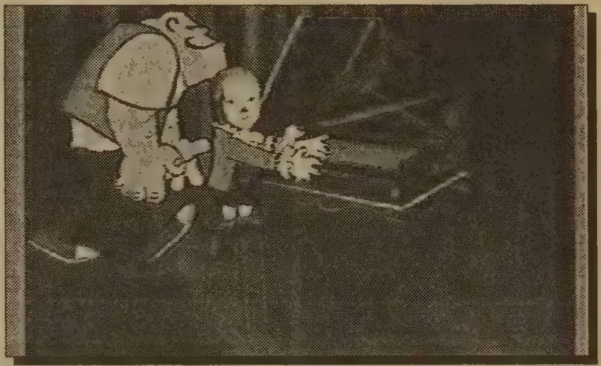
The backgrounds are just static.

This is what we provide the client, 8mm tape. A 120-minute tape will hold about 10GB. A sixty-minute will hold a little over three thousand frames.

You use ARexx to control ADPro quite extensively. Aren't there programs that do this for you?

I don't mind writing ARexx scripts, because a lot of times you have to do very specific things. Now ProControl [ASDG] does quite a bit and so does Multiframe [MacroSystemUS]. They both have things that are really handy. But there are some times you need to get so specific you gotta write it. Thank God for ARexx. I would say 70% of the animations that I did on *Carmen Sandiego* had an ARexx script to do the final compositing. No way I could have turned out thirty minutes of animation in that period of time, of that type of single-frame animation, without ARexx. And I am excited that DeluxePaint 5 [a forthcoming upgrade] will support ARexx.





It's amazing how powerful DeluxePaint is.

It's much more powerful than I think people realize. At Electronic Arts, they never think of DeluxePaint, even

RESOURCES:

Jim Carey
(805)495-2745

CAMERA
Edit
Edit

ANIMATION MASTER™

Now you can create 3D Animation and Pictures At Home with ANIMATION MASTER, the easy-to-use 3 Dimensional Animation Studio. (From the creators of Will Vinton's PLAYMATION)

ANIMATION MASTER gives both beginning & experienced animators easy to learn tools with these powerfully advanced features:

- RAY TRACING
- IMAGE MAPPING
- INVERSE KINEMATICS
- SKIN & ANIMATED PROCEDURAL MAPS.

System Requirements:
IBM PC or Clone 386/486 w/ math co. Windows 4 meg RAM
MAC II w/ math co., System 7, 4 meg Ram
Power PC, 8 meg RAM, w/ math co.
SGI, all

Now you can Create 3-D wireframe animations of Anything! Render at blazing speed in 24 bit COLOR. Create Incredible HOLLYWOOD SPECIAL EFFECTS AT HOME!!!

Don't be a talker, be a DO'er! All it takes is your computer and a killer imagination. SO DO IT!!!

CALL FOR INFO TODAY

DEMO VIDEO AVAILABLE

800/ 377-8287
Sales: 818/ 566-8551
FAX: 818/ 566-1036
Dealers Welcome.

ANJON & ASSOCIATES

DO IT!

714 Angeleno St.
Burbank, CA 91501

Mouse Sale
(High Quality, Low Price)

Microsoft Serial Mouse	$24
MS compatible serial mouse	$8
Mouse Systems PC Trackball II	$48
Genius HiTrak Tackball	$45

Versatile Features
Extraordinary Performance
Sleek Design
Always Reliable

SUPER SALE

LYNX'S CUSTOMERS: IBM, INTEL, AMD, NASA, NAVAL, SFUSD, NetFRAME, TEKTRONIC...

Versatile Features
Extraordinary Performance
Sleek Design
Always Reliable

6-OUTLET STRIP
with Circuit Breaker Protection

$3 (one per customer, limited Qty)

EVERYDAY LOW PRICES

CASES & POWER SUPPLIES

DELUXE Full-208GT (2 FANS, Easy Access Side Doors, 4 Exp'd, 3 hid'n, 250W UL)	$150
Mini-104T (4 exp'd, 1 hidden, 200W PS)	45
Med-106T (5 exp'd, 3 hid'n, 200W UL PS)	70
Full 108T (4 exp'd, 7 hid'n, 230W UL PS)	95

POWER SUPPLIES

Full PS 230W UL/250W UL/300W UL	$39/45/65
Baby PS 200W /200W UL/230W UL	35/40/44
Green PC Power Supply (PS/2)	50

FLOPPY, HARD, TAPE, & CD-ROM DRIVES

TEAC 1.2MB/1.44MB FDD	$46/38
All Hard Drives	CALL
Colorado 120/250MB Tape Drive	139/159
Sony CD-ROM (31A) w/Controller	128

VGA CARDS

Misc.	
MGP/MCGP ISA	$14/19
SVGA ISA 256K/512K/1MB	30/40/58
ET4000 W32i VLB 1MB/2MB	115/175
ET4000 W32P PCI 2MB	225
Cirrus Logic 5426/5428 VLB 1MB	80/80
ATI Graphics	
Ultra Pro VRAM 1MB/2MB	265/289
Ultra Pro EISA VRAM 2MB	325
Ultra Pro VLB Mach-32 VRAM 1MB/2MB	265/325
Diamond	
Stealth 32 2MB VLB/PCI	229/229
Stealth 64 2MB/4MB VLB/PCI	339/449
Stealth Pro ISA 1MB/2MB	245/345
Stealth Pro VLB 1MB/2MB	255/345
Stealth PCI 1MB	199
SpeedStar Pro ISA/VLB 1MB	125/125
Stealth 24 ISA/VLB 1MB	139/145
Viper 2MB VRAM Accelerator VLB/PCI	325/355
Number Nine	
9GXL L-25F 3MB ISA	1259
9GXL L-10 1MB ISA/VLB	249/249
9GXL L-11 2MB ISA/VLB	335/335
9GXL L-12 3MB ISA/VLB	395/405
9GXL L-14 4MB ISA	595
9GXL L-16 4MB VLB	895
Orchid	
Celsius VLB VRAM 1MB/2MB	225/285
Fahrenheit 1280 Plus ISA 1MB	139
Fahrenheit 1280 Plus VLB 1MB/2MB	149/209
Fahrenheit 1280 VA or VA/VLB 1MB/2MB	175/205
Kelvin 64 1MB/2MB PCI/VLB	155/199
Spider	
Spider VLB DRAM 1MB/2MB	95/145
Spider VLB Plus DRAM 1MB/2MB	115/165
Black Widow VLB VRAM 1MB/2MB	169/239
Hercules	
Graphite VRAM 2MB ISA/VLB	329/329
Dynamite DRAM 1MB/2MB ISA/VLB	189/259

MONITORS

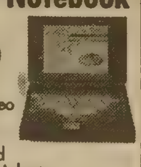
14" MONO/VGA MONO Monitor	$79/85
14" SVGA MONITOR INT .28/.39	190/180
NANAO	
F550i (17" 1280x1024 .28 2nd inv.)	835
F550iw (17" 1280x1024 .28 75Hz)	925
F560iw (17" 1280x1024 .26 TRIN.)	1159
T660i (20" 1280x1024 .31 72Hz)	1995
F7601W (21" 1280x1024 .31)	1885
NEC	
3FGe (15" 1024x768 .28 NI)	549
4FGe (15" 1024x768 .28 NI)	620
5FGe (17" 1024x768 .28 NI)	949
5FGp (17" 1280x1024 .28 NI)	1075
6FGp (21" 1280x1024 .28)	1995
SONY	
17SE1 (17" 1600x1280 .25 NI)	948
VIEWSONIC	
V6E (14" 1024x768 .25 NI)	276
V15EX (15" 1024x768 .28 NI)	369
V15 (15" 1280x.1024 .28 NI)	439
V17 (17" 1600x.1280 .28 NI)	899
V17G (17" 1280x1024 .28 NI)	765
V20 (20" 1600x.1280 .28 NI)	1399
V21 (21" 1600x.1280 .26 NI)	1695

Introducing the LYNX 486 VESA/PCI Local BUS mainboard
(Motherboards Designed and Manufactured in the U.S.A.)

OEM and ODM Inquires Welcome.

	486VI	486V2	4GPV4 (Green-A)	4GVIP4 (Green-B)
Chipset	Contaq	Contaq	Contaq	Contaq
BIOS	AMI	AMI	Award/AMI (Flash BIOS Optional)	AMI (Flash BIOS Optional)
Energy Green	NO	NO	YES	YES
Processors (SX/DX/DX2)	All Intel/AMD Cyrix (M7 series)	All Intel/AMD Cyrix (M7 series)	All Intel/AMD Cyrix (M7 series)	All Intel/AMD Cyrix (M7 series) INTEL DX4-100
Max. Memory	128MB (30 pins)	128MB (30 pins)	128MB (30 pins)	128K (**72 pins**)
Max. Cache	256K	256K	1MB	1MB
Expansion Slots	2 VESA BUS 6-32 bits ISA BUS	2 VESA BUS 6-162 bits ISA BUS	3 VESA BUS 5-16 bits ISA BUS	**3 PCI BUS** **1 PCI/ISA BUS** 2 VESA BUS 3-16 bits ISA BUS
CPU Socket	Standard	Ziff (overdrive)	Ziff (overdrive)	Ziff (overdrive)
Bus Master	2 Slots	2 Slots	3 Slots	6 Slots
Dimension	8.7" X11"	8.7" X11"	8.7" X11"	8.7" X11"
Sale Price 256K Cache	$118	$128	$138	$180

GeoBook 300 Notebook



- 486SX-33MHz Upgradable to DX/DX2)
- 4MB RAM (Max. 20MB)
- 1.44MB Floppy Drive
- 120MB Hard Drive
- 9.5" VESA Local Bus Video
- Built-in PCMCIA drive
- Built-in 16mm Trackball
- Built-in 12 Num Key Pad
- NiCad Battery, AC/DC Adapter

Monochrome	$1360
STN Dual Scan Color	$1910
TFT Active Color	$2910

Gallop C6000 Notebook

- 486SLC-33MHz CPU
- 4MB RAM
- 1.44MB Floppy Drive
- 120MB Hard Drive
- 9.5" VESA Local Bus Video
- Built-in SCSI Interface
- Built-in 16mm Trackball
- Built-in 12 Num Key Pad
- NiCad Battery, AC/DC Adapter

Monochrome	$1245
STN Dual Scan Color	$1790

CONNER

IDE

210MB IDE $159

14ms, CFA210

Quantum

Specify Quantum, Specify Quality

NEW EMPIRE

1.08GB FAST SCSI-III
3.5 "X1"

512K Cache, 9.5ms **$589**

matrox

HIGH PERFORMANCE GRAPHICS ACCELERATOR

Revolutionary 64-Bit Architecture • DynaView 2D & 3D • Refresh Rate Up To 80Hz.

MGA ULT2VH Ultima VLB 2MB 1600x1200 Capability **$459**

DX4-100MHZ POWER SYSTEM

New LYNX
DX4-100MHz Multimedia System
• Upgradable to Pentium • 425MB HDD • 4MB RAM Upgradable to 128MB • Internal High-Speed Fax/Modem 14.4Data • 32 Bit Local Bus 1MB Graphics card • Internal CD Reader, double Speed, Photo CD compatible • MS DOS 6.21, MS Windows 3.10 • 16 Bit Stereo Sound Card • TEAC 1.2MB & 1.44MB FDD, Keytronic Keyboard
• Software and speakers
• Tower Case

$1749

Media Magic ISP-16 Audio Board

16-Bit stereo recording and playback
5.5-48 Khz sampling rate
20-Voice OPL3 FM synthesis
AT-Bus CD-ROM Interface

$67 (Limited Qty)

IBM

486SLC2-50 ISA with CPU	$146
486SLC2-66 VLB with CPU & 64K Cache	$238
486SLC2-66 VLB with CPU & 128K Cache	$252
*IIT 387-33MHz Math Co-Processor	$20

Hercules *The Fastest Real-World Windows Accelerator*

Blazing 32-Bit Accelerator for Windows and AutoCad
High Refresh Rate
Dual Ported VRAM,
2-Year Warranty

HG720 Graphic VL Pro 2MB VLB... **$329**

SPiDER. Graphics, Inc.

BLACK WiDOW Plus PCI/VLB

The Power of Graphics Co-Processor
- IIT AGX-016: Co-Processor Accelerator
- Fast VRAM
- 135MHz High Color DAC up to 90MHz (N/I)
- Ultra High Resolution 1600x1200

1MB VRAM/2MB VRAM........$165/235

ATi

PRICED TO SELL

Graphics Ultra Pro 2MB VLB........$279

SIMM MEMORY

1MB 70ns (30 PINS)	$35
4MB 70ns (30 PINS)	$138
4MB 70ns (72 PINS)	$145
8MB 70ns (72 PINS)	$310
16MB 70ns (72 PINS)	$570

CACHE MEMORY

32X8 20ns	$5
32X8 15ns	$6

TEKRAM Cache Controller	Blow Out
DC-600 ISA/IDE	$97
DC-620B EISA/IDE	$155
DC-680 VLB/IDE	$125
DC-800 ISA/SCSI	$185
DC-800 ISA/SCSI w/1MB	$210
DC-820 EISA/SCSI II	$325

$4	$3	$5
MF-505 Mounting Kit	MF-430 Bracket	486 CPU Fan

ADI NON-INTERLACE

ADI 3G (14" 1280X1024)	$279
ADI 4G (15" 1280X1024)	$359
ADI 5GLR (17" 1280X1024 Low-Radiation)	$689

14.4/14.4K DATA/FAX Modem

MNP2-4, V.42
MNP5, V.42 bis
w/BitFax & BitCom (Win)

Internal	$69
External	$80
Pocket	$88

(limited quanities)

MONTHLY SPECIALS

486SLC 33 ISA w/CPU	$88
TEAC 1.2MB & Teac 1.44MB FDD	$77
Epson dual Drive Combo	$94
IDE I/O ISA/VLB	$12/18
Mini/Med Tower Case w/PS	$37/56
Adaptec 1542C w/o kit	$156
Promise DC-4030 IDE Caching VLB	$125
Ultrastor 34F VLB SCSI controller	$259
Focus FK2001/FK9000 Keyboard	$40/52
Keytronic Keyboard	$28
Sony Double Speed CD ROM w/kit	$128

Mitsumi CD-ROM

Double Speed
250ms Access Time
300Kbps Transfer Rate
Full MPC Compatibility
16-bits Audio Card

$128 (Limited Qty)

SPECIAL

Dual cooling fans, Easy Access swing open side doors, Slide 'n Snap drive rails, 4 exposed and 3 hidden drive bays, 250W UL power supply.

$150 (208GT)

upgrade to 300W UL PS	ADD $20
Medium Size w/250W UL(210GT)	$120

SVGA Non-Interlace MONITOR

(Model: CS-1404)
Non-Interlace 1024x768
14" SVGA .28mm dot pitch

$199 (one per customer, limited qty)

14" Monochrome Monitor $74

- CPU and memory related products are not exchangeable or refundable
- Quantity is limited to stock on hand
- Not responsible for typos or technical errors
- All prices reflect cash only
- Prices subject to change w/o notice

GOVERNMENT, UNIVERSITY AND APPROVED CORPORATE P.O.'S WELCOME • 1 YEAR PARTS/ 3 YEARS LABOR/ LIFETIME TECH SUPPORT • LIMITED WARRANTY

LYNX

STORE HOURS
MON-FRI 9AM-6PM
SAT 10AM-5PM
SUN BY APPT. ONLY
SINCE 1987

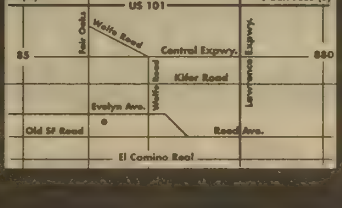
LTI Leopard Technology
INTERNATIONAL

624A EAST Evelyn Avenue, Sunnyvale, Ca 94086

NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. PRICES SUBJECT TO CHANGE WITHOUT NOTICE. Prices reflect special discou

Company P.O.'s & Dealer Inquiries WELCOME! CALL FOR CURRENT PRICES

(408) 481-9288 FAX:(408) 481-0866



DeluxePaint 5, as a professional program. "This is a program for amateurs"—that's the way they look at it.

Of course, I'm always urging them to do a little bit more. There are a few more things I would like in there, which they probably won't be able to put in because they don't think many people would take advantage of it, because they don't view it as a professional program.

What's the definition of "professional"?

Exactly.

Some of your techniques seem to break tradition.

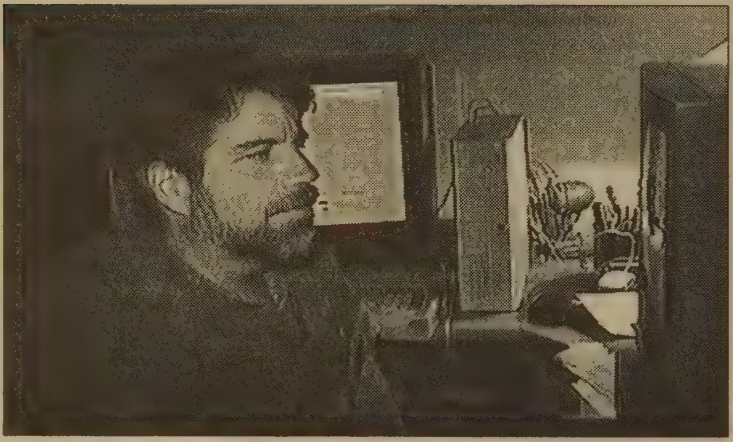
That's true. In fact, you want to stay away from tradition. The thing about it is, you usually have to learn the tradition before you can learn how to stay out of it. Rules are usually written after somebody's done something enough times. By the time they are codified, it's time to break them.

But it's a necessary evolution.

You get used to things and you have to take it a step at a time. I think that's true for the artists and animators, as well as the audience—you kind of have to grow up into it. I don't think you can just sit down and listen to a symphony by Beethoven and immediately grasp what you're supposed to grasp. You have to bring some information along with you.

Do people care that you do things on an Amiga?

I've gone to see a few companies, and there is a prejudice when they find out



I'm using an Amiga. I think I've lost some jobs because they know I'm using an Amiga—even though I know the stuff they're working with. I would say well over half of the clients out there don't care. Part of that is because they don't know what the platform is doing anyway; the people that do know about the Amiga appreciate it.

Recently a director came to my office, sat down, and saw all of the equipment right there in front of him that the work was being done on. I showed him a few clips from the *Carmen Sandiego* show and he was just amazed. "You did that on this computer?" He couldn't believe some of the things I was doing, especially the pans and scans on animated pieces, and some of the image processing.

You have to be a little worried now about the Amiga. Have you investigated Mac and PCs?

I was worried when I first learned about what was happening with Commodore—I've since regained a little optimism. So I started looking at what's

Continued on page 173

> Animator Jim Carey: "Thank God for ARexx. I would say 70% of the animations that I did on Carmen Sandiego had an ARexx script to do the final compositing."

NewTek And Commodore Update

Just by chance, NewTek was working on its next promo tape close to where I work, and I received a surprise invitation from NewTek marketing head Donetta Colboch and Toaster trainer extraordinaire Lee Stranahan. I also finally met NewTek president Tim Jenison and his wife Leslie. Everyone was extremely nice and I hope I don't end up on the proverbial cutting room floor.

With some help from Brad Peebler, while at the studio I had a chance to really play around with the Flyer. Now I know where the name came from. The hand-made prototype board I saw had three PC board fans mounted on it and two PC box fans balanced on the edges of the opened A4000's case—any minute it was about to take off! I don't want to say too much about it now, other than it is an awesome product.

Lightwave 1.5 should be shipping by the time you read this, both in standalone and VideoToaster upgrade versions. There are several improvements, most notably the new Metaform feature that can help you literally turn a 2-D rectangle into a beautiful 3-D sports car in minutes.

At the L.A. Video Toaster Group meeting, Jenison spoke and provided some frank information on the future of the Amiga. According to Tim, two of the bidders are Samsung and a group headed by Jim Dionne, the former president of Commodore US. Dionne knows the Amiga and it would be wonderful to have him at the helm.

Tim also indicated that the bankruptcy trustees have made it clear that buyers must promise to get Amigas in production as soon as possible. NewTek seems to be totally confident that the Amiga will survive and that ample supplies of machines exist until production can resume. ■

MEMORY
WE BUY AND SELL DRAM, SIMM, SIPPS
AT VERY GOOD PRICES, IBM COMPATIBLE & APPLE
CALL FOR LATEST PRICES & AVAILABILITY

COMPAQ
PARTS & ACCESSORIES
30% OFF

apple
LOWEST PRICES ON MEMORY
SPECIAL!!!
8 MB 30 Pin SIMMS...$256
426 MB HARD DRIVE...$375

IBM & COMPATIBLES
LOWEST MEMORY PRICES

WE CERTAINLY WELCOME OEM & RESELLERS

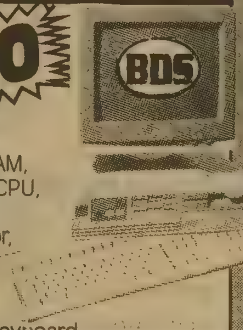
WE BEAT ANYONE'S PRICES!

C.G.I. TECHNOLOGY

CALL FOR LOWEST GUARANTEED PRICE!
(408) 973-9840
FAX: (408) 973-1925

THE BDS WORKHORSE 66 MHz PENTIUM SYSTEM

$2200



Includes: 8MB RAM,
Motherboard & CPU,
340 MB HDD,
15" SVGA Monitor,
1MB SVGA PCI Card
1.2 MB FD
Keytronics 101 Keyboard

The BDS Super High-Performance 100 MHz 486-VESA Local Bus System

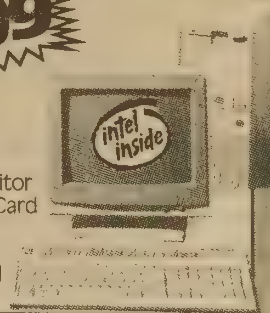
$1250

486 DLC-40	$589
486DX-33	$749
486DX2-66	$799
486SX-33	$599
ISA 486DX-50	$785
IBM 486SLC-66 VESA	$655

ALL BASIC SYSTEMS INCLUDE:
Motherboard with CPU, 210 MB Hard Drive, 4 MB RAM, 1.2 MB Floppy, IDE VLB Controller, 101 Keyboard, I/O Ports, Minitower or Desktop Case, 200W PS

90 MHz PENTIUM VESA SYSTEM

PCI **$2999**



8MB RAM
MB & CPU
1 GB SCSI HD
15" SVGA Monitor
VESA LB 2MB Card
SCSI Contr.
1.2MB FD
Keytronics 101 Keyboard

Apple® Macintosh Quadra® 660 AV w/CD 8/230

- This computer obeys your commands
- 25 MHz 68040 microprocessor
- 55 MHz digital signal processor for audio visual technology like voice recognition and video capture
- 8 MB RAM & 230 MB HD

$1699

MULTIMEDIA IBM 486SLC2-66

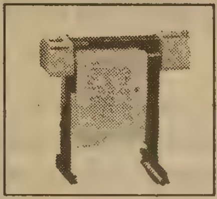
Multimedia
- **Over $800 Worth of Software**
- **CD-ROM**
- **Sound Card**
- **Stereo Speakers**

This best selling multimedia package comes complete with 170 MB hard drive, 4 MB RAM, modem, and monitor.

$1299

BEST PRICES ON ALL HP PRODUCTS

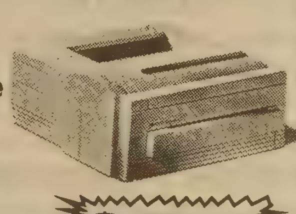
HP Plotters



LaserJet 4L

HEWLETT PACKARD

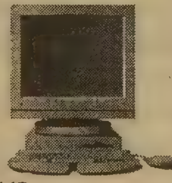
- ❖ 300 dpi & 4 pages per minute
- ❖ PCL 5 & 26 scalable fonts
- ❖ 100 sheets adjustable tray
- ❖ Memory enhancement technology



$639

DeskJet 520	$280	LaserJet 4M	$1869
DeskJet 560C	548	LaserJet 4M+	1869
DeskJet 1200C	1385	LaserJet 4si	2865
LaserJet 4+	1385	LaserJet 4siMx	4450
LaserJet 4	1295	ScanJet IIP	499
LaserJet 4P	930	ScanJet IICX	925
LaserJet 4MP	1330	Portable 310	295

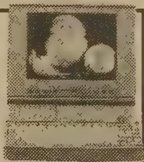
Apple® Macintosh Quadra® 610 8/230



- 25-MHz 68040 Processor
- 6882 math co-processor
- 8 MB RAM expandable to 68 MB
- 230 MB internal hard drive
- Affordable performance, flexibility, and room to grow

$1650

MULTIMEDIA NOTEBOOKS



The state-of-the-art notebook with multimedia capabilities. Supports Intel SL-enhanced 486 CPU (up to DX4/100), 32-bit VESA Local Bus performance, PCMCIA expansion slots, removable hard drive, ergonical trackball, built-in Audio & Speaker and more!

•486DX-33/4MB/340MB HDD/MONO	$1770
•486DX2-66/4MB/340MB HDD/MONO	$1775
•486DX-33/4MB/340MB HDD/DUAL SCAN	$2250
•486DX2-66/4MB/340MB HDD/DUAL SCAN	$2285
•486DX-33/4MB/340MB HDD/ACTIVE COLOR	$3379
•486DX2-66/4MB/340MB HDD/ACTIVE COLOR	$3415

MOTHERBOARDS Vesa LB w/Intel CPU

Pentium 90 VLB PCI	$1260
Pentium 60/66 VLP/PCI	900/999
486DX4-100 VLB 256K	750
486DX2-66 PCI/VLB 256K	510
486DXII-66 VLB 256K	385
486DX-50 VLB 256K	465
486DX-33 VLB 256K	335
486SLC2-50 IBM VLB 64K	233
486SLC2-66 IBM VLB	271

MOTHERBOARDS w/CPU

486DLC-40 TI	$149
486Sx-25/33	149/162
386DX-40	99
386SX-40	72
386SX-33	64

MODEMS

2400 Baud (Int)	$30
2400 Baud (Ext)	50
Fax Modem (9600 Fax, 2400 Modem)	45
14,400 Modem, 14,400 Fax	118

CD ROMS

Mitsumi Double Speed	$136
SONY 33A Double Speed	129

CD ROM WRITERS

YAMAHA CDR-100	$4500
PHILLIPS CD Writer	4600

HARD DISKS

215 MB Conner	$175
250 MB Seagate	200
340 MB W.D.	210
540 MB Maxtor	310
1 GB IDE	595
1 GB Seagate SCSI	665
1 GB Quantum SCSI	655
1.7 GB Micropolis	930

MONITORS

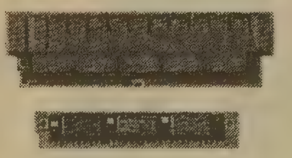
14" Apple SVGA	$295
14" SVGA Multiscan .39	189
14" SVGA Multiscan .28	230
14" Non-Interlaced Multiscan .28	249
14" Mono VGA Paper White	99
14" Mono	82
15" Non-Interlaced Multiscan	355
17" Non-Interlaced Multiscan	699
17" Apple SVGA	985

ADD-ON CARDS

IDE I/O 2S/1P/1G	$15
VESA LB IDE I/O	35
VESA LB VGA 1 MB	89
VESA LB VGA 2 MB	139
Trident 1 MB	65

NETWORK CARDS 2 Year Warranty

NE-2000 Ethernet 16 Bit Coax	$48
NE-2000 Ethernet 10T Base 16 Bit	48
NE-2000 Ethernet Combo 16 Bit	52
Arcnet 16 Bir Coax 16 Bit	56
Arcnet 16 Bit Combo	59
3 Com 16 Bit 503	158
3 Com 16 Bit 507	183
3 Com 16 Bit 509	132



SIMMS

1x9-80 3/9 Chip	37/44
1x9-70 3/9 Chip	37/40
1x9-60 3/9 Chip	39/44
1x8-80 2/8 Chip	35/42
1x8-70	46
1x8-60	47
4x9-60	150
4x9-70	149
4x9-80	147
4x8-70 8 Chip	142
4x8-80 8 Chip	140
256x9-80	12
256x9-70	13

72 PIN SIMMS

512K x36-70	$89
2MB 604-80ns	79
4MB 1x36-80ns	165
4MB 1x36-70ns	169
4MB x 36-60ns	640
8MB 2x36-80ns	330
8MB 2x36-70ns	335
16MB 4x36-70ns	615
16MBx36-60ns	625
16MB 4x32-70ns	569

Sound Blaster CD16
Voice

SOUND BLASTER CD-16 MULTIMEDIA KIT

- PANASONIC CD-ROM DOUBLE SPEED
- SPEAKERS
- 7 TITLES
- SOUND BLASTER 16 BASIC CARD

$385

HP LASER

HP III/IID 2/4MB Board	$125/220
HP 4/4M 4/8MB	179/369
HPIIP/IIP+/III/IIID	99/135/159/220
IIsi 4/8 MB	179/299
DeskJet 500/500C 550C 256K	89
DeskJet Plotter 4 MB	155

IBM PS/2 & PS/1 MEMORY

PS/1 286/386SX 2/4MB	$135/225
PS/1 Consultant Ess 1/2/4/8MB	79/99/189/320
386ValuePoint 2/4/8MB	99/179/325
486 Valuepoint 4/16MB	189/595
PS/2 30-286 2 MB	99
50Z,56SX,66SX,70 2/4MB	99/179

INTEL MATH CO's

80C287-12 MHz	33
80397SX-16, 20, 25	50
80387DX-16, 20, 25, 33	65
80387DX-25 (Tube)	63
CRYIX	
83D87-40 40 MHz	$56
83D87-25 25 MHz	56
83D87-33 33 MHz	56
83SX87-33 33 MHz	55
IIT	
80C387SX-25	35
80C387SX-33	39
80C387DX-20	38
80C387DX-25	40
80C387DX-33/40	42

Upgrade & Repair

3 Years Labor and 1 Year Parts Warranty

MasterCard VISA

BDS INTERNATIONAL

1500 Norman Ave. #B, Santa Clara, CA 95054
Phone: 408-988-8777 Fax: 408-988-3758

101
Montague Exp.
NORMAN AVE.
BDS
Thomas
Lafayette

Best Price • Best Service • Best Quality • Best Support

Prices Reflect Cash Discount. Prices Subject To Change W/O Notice.

available for what I do on the Mac and the IBM. I can put together a number of programs on the Mac and IBM that would be far more expensive than I am used to paying for on the Amiga.

The biggest limitation is I have yet to find a comparable program to DeluxePaint. I wish someone would tell me about a program that animates as easily, while still allowing me to work in 8-bit and in video resolution, 724 x 482. I haven't found it yet. Right now, I can do essentially everything I want to do 2-D-wise with ADPro and DeluxePaint.

What machine out there, what IBM or Mac is going to have the Toaster, plus ADPro, plus DeluxePaint, plus multitasking, plus...? I can't imagine another machine giving me the productivity that this machine has given me with multitasking. I'm always running two programs, sometimes three.

The other big advantage I've found is the Amiga community itself. The programs that I use have great tech support. I find I can get a hold of somebody on the phone and they listen to my problem. It's obvious they listen to users, because the programs that I use are upgraded constantly and have just gotten better. I mean, look at ADPro, DeluxePaint—it's just a constant improvement.

And often you get to talk to the actual programmer.

Right! More times than not, I do talk to the programmer. And I have been in a situation more than once, where I've talked to the programmer and gotten an upgrade to solve a particular problem. With ASDG on *Carmen Sandiego*, we got the new 8505 Exabyte and they upgraded their software for us. They downloaded it to me directly and I was using it an hour later. I can't imagine that in the IBM world.

Can you summarize your feelings on the Amiga?

The thing about the Amiga which is most important to me is the programs I've chosen to use, which have made it so easy for me to express my creativity. Because of the way the programs are written, because of the user-friendliness of the Amiga, because the Amiga multitasks, I can eliminate the technique and work right on the creative process, putting it together. If I have an idea, I can get right to it, and I won't lose that idea.

Because of the depth of the programs, like ADPro and DeluxePaint, I can solve problems. If I want to do something, I can figure out how to do it with these programs. I probably could do it with other programs, but I grew up with ADPro and DeluxePaint, and now the VideoToaster. Because it's not that easy for me to learn a program, I struggle... But once I learn one, I stick with it. ■

Copyright © 1994 by Douglas J. Nakakihara. All rights reserved.

32-BIT SALE
ON LATEST OS/2 APPLICATIONS

Development Tools
Productivity Software
Communication & Networking
Backup Software
Graphics & CAD
Utility Software

This is a Limited Time Offer!
Give Us a Call!
Orders: 800-804-8588
FAX: 310-804-6154
(CATALOG available)

OS+
OS+ RESOURCE
For Leading Edge Software
10140 Artesia Place, Ste. C
Bellflower, CA 90706

MULTIMEDIA

Solutions that solve your worst problems or just make life easier.

Kiosk Systems

- ☐ Information
- ☐ Sales
- ☐ Communications

Computer based Training Systems.

- ☐ Self-guided training for new employees
- ☐ Safety training and testing

Presentations

- ☐ Interactive stand-alone presentations for shows and conventions
- ☐ Marketing and sales
- ☐ Demonstrations

HMS

HAMILTON MULTIMEDIA SYSTEMS, INC.
1733 South Douglass, Suite G
Anaheim, CA 92806
(714) 978-9487 FAX: (714) 978-9651

Partial Client List:
NCR Corporation, Remedy Temp, Express Personnel Services, Auto Trader San Diego, Imperial Credit Industries, Microtimes, Citizens Thrift & Loan, City of South Gate, Highland Federal Bank, Ormond Inc., Pioneer Savings and Loan, and more. . .

DUAL PENTIUM SYSTEMS.....NOW AVAILABLE AT NOW!!!

Things That Make You Go Hmmmm!

#2

For many years, PC users opted to use the more expensive SCSI interface over the IDE for three main reasons: Higher throughput, Higher drive capacities and the ability to "daisy chain" peripherals. Recent development of IDE interface brings it close to the SCSI. The new *Enhanced IDE* interface standard offers new features such as: 1) increased throughput up to 16.7MB/sec, 2) increased drive capacities to 8.0+ GB and 3) ability to support multiple peripherals off the same controller. The Enhanced IDE interface is currently used in some of our Pentium systems.

Hmmmm! Hmmmm! Hmmmm! Hmmmm! Hmmmm!

The recent introduction of 64-bit architecture, whether it's on the motherboard or the video card, has created confusion among new PC buyers who often believe they're getting a *64-bit based PCI* system. The truth is the PCI bus is still at 32-bit, but the 64-bit bus is usually between the Pentium and memory (RAM & Cache). Likewise, a 64-bit based video card has the 64-bit bus between the Graphics accelerator chip and the video memory. Once the 64-bit PCI bus is fully developed, you can count on NOW to be the first to introduce it!

Hmmmm! Hmmmm! Hmmmm! Hmmmm! Hmmmm!

The Upgradeability of a new system is probably the most important element new buyers look for, and often give it more weight in the decision process than it deserves. Realistically speaking, at the rate the PC industry is advancing, by the time you're ready to upgrade you're probably better off buying a new system or motherboard. For example, many of you are anxiously awaiting the P24T OverDrive which will go into DX/DX2 systems that have 32-bit bus, but for a little more money you will probably be able to buy the more advanced 64-bit Pentium Processor and motherboard.

From the Engineering Department of NOW Electronics, Inc.

REVENGE

$2795

Pentium 60MHz Processor
Intel Premiere Motherboard
Diamond Viper PCI Video

Pentium 66MHz
$2895

Specification:

- 60MHz Intel Pentium Processor 16K
- Intel Premiere/PCI 64-bit Motherboard
- 16MB 70ns RAM, 256K WB cache
- Western Digital 425MB IDE 12ms HD
- 1.44MB Floppy Drive
- ViewSonic 15ex Flat .28dp NI Monitor
- PCI Diamond Viper PCI 2MB VRAM
- PCI Integrated Enhanced IDE Controller
- Deluxe Medium Tower Case 250W
- 101 KeyTronic Keyboard
- 2-PCI, 4-ISA and 1-PCI/ISA slots
- OverDrive Socket, 16554 Ports
- DOS 6.2, Windows 3.11 & Mouse

Special Features:

The Revenge incorporates the latest motherboard from Intel Corporation-Premiere Batman, and a Video Card that is designed by the leader in Graphics accelerator Cards-Diamond Computer Systems.

*Benchmarks**

- *WinMarks (million)*.......................**84**
- *LandMark v.3.1 (ps/sec)*
  - *CPU*.................................**2699**
  - *FPU*.................................**1069**
- *iCOMP*......................................**510**
- *SPECint/fp92*.....................**63/55**

ECCENTRA 17

$3995

Pentium 90MHz Processor
Qlogic RISC PCI Controller
17" IDEK .26dp Monitor

Specification:

- 90MHz Intel Pentium Processor 16K
- Intel Premiere/PCI II Plato 64 bit
- Intel Neptune PCI Chip-set
- 16MB 70ns RAM, 256K WB Cache
- 540MB Quantum SCSI-2 Fast 256K
- 1.44MB Floppy Drive
- 17" IDEK Vision Master .26dp 1600x1280 Monitor (must see!)
- PCI ATi Turbo Mach64 64 bit 2MB VRAM
- PCI Qlogic Fast Wide SCSI-2 Controller
- Full Tower Case 300W PS
- Focus 2001 Click Keyboard
- 2-PCI, 4-ISA and 1-ISA/PCI slots
- OverDrive Socket, 16550 UART Ports
- DOS 6.2, Windows 3.11 & Mouse

Special Features:

With Benchmarks of 123Mil Winmarks on the Video and up to 20MB/Sec sustained transfer rate on the hard drive, the Eccentra is the best choice for applications that are video and hard drive intensive.

*Benchmarks**

- *WinMarks (million)*.....................**123**
- *LandMark v.3.1 (ps/sec)*
  - *CPU*.................................**3493**
  - *FPU*.................................**1604**
- *iCOMP*......................................**735**
- *SPECint/fp92*.....................**90/72**

ENIGMA 90

$4995

Pentium 90/100MHz Processor
Diamond ViperPro 4MB
17" NEC 5FGp Monitor

ENIGMA 100
$5295

Specification:

- 90/100MHz Intel Pentium Processor 16K
- Intel Premiere/PCI II Plato 64 bit
- Intel Neptune PCI Chip-set
- 16MB 60ns RAM, 256K WB Cache
- 1.0GB Quantum Empire FSCSI-3 9ms
- PCI Adaptec 2940 FSCSI-2 Controller
- 1.44MB Floppy Drive
- 17" NEC 5FGp 1280X1024 Monitor
- PCI Diamond ViperPro 64-bit 4MB VRAM
- GT-300 Full tower case 300W w/Door
- Focus 9000 Programmable Keyboard
- 2-PCI, 4-ISA and 1-ISA/PCI slots
- OverDrive Socket, 16554 Ports
- DOS 6.2, Windows 3.11 & Mouse

Special Features:

Enigma delivers a performance that is unprecedented on a PC platform, its benchmarks exceed those of workstations that often cost 3–4 times as much. Enigma also features the sharpness and brightness of the NEC 5FGp 17" monitor.

Benchmarks (100MHz)*

- *WinMarks (million)*.......................**91**
- *LandMark v.3.1 (ps/sec)*
  - *CPU*.................................**3988**
  - *FPU*.................................**1782**
- *iCOMP*......................................**815**
- *SPECint/fp92*...................**100/80**

SERVER MPE

$7795

Server MPE is designed to take full advantage of the 32-bit Windows NT and the Multi-Processor technology. By combining two Pentium 90MHz Processors, EISA/PCI Buses and Fast Wide SCSI-2 hard drive/controller, this server is guaranteed to deliver the ultimate performance ever recorded. However, don't let the name scare you away, Server MPE is also an excellent stand alone system for high power users. Please call for more information.

- DUAL Pentium 90MHz Processors
- 1xP54C and 1xP54CM 90MHz processors
- EISA/PCI Multi-processor 64-bit Architecture
- 512K Write back Cache, Flash EPROM
- Intel Neptune PCI Multiprocessor Chipset
- 32MB Fast 60ns 72-pin RAM up to 512MB
- 2.1GB Seagate ST2550W 8ms Fast Wide SCSI-2
- PCI Adaptec 2940W Fast Wide SCSI-2
- 2.88MB high Density Floppy Drive
- 14" SVGA .28dp NI Monitor
- SVGA 1MB Video Card
- Server Case with 300W PS and Doors
- 101 Enhanced Keyboard
- 3-PCI, 3-EISA and 1-PCI/EISA slots
- 2 Serial 16550 and 2 Parallel Ports
- DUAL Pentium OverDrive ZIF Socket
- Microsoft Windows NT
- NEC 3Xi CD-Rom

**Obtained from the Manufacturers' Specs/ads*

RISC Processor Based Systems-32-bit/64-bit Local Bus/PCI-MIPS and DEC's Alpha!

Introducing a new line of high-performance systems based on RISC processors. Now you can configure your own RISC based system. All systems are Pre-loaded with Microsoft Windows NT and are specifically tuned to optimize its performance.

MIPS RISC 4000/4400 50/100MHz & 75/150MHz

- 64-bit MIPS design RISC Processor
- R4000PC-100/133MHz (2X) 16K int. Cache
- R4400PC-100/150MHz (2X) 32K int. Cache
- 512K External L2 Cache
- 16MB RAM 72-pin 64-bit Bus (max 256MB)
- 540MB Fast SCSI-2 8.5ms Hard Drive
- 64-bit Integrated Fast SCSI-2 interface
- 1.44MB High-density Floppy Drive
- 64-bit Local Bus Video adapter 2MB VRAM Upgradeable to 4MB 1280x1024 16.7M colors
- Deluxe Full-Tower Case 250W with door
- 101 Enhanced PS/2 compatible Keyboard
- 5-ISA Expansion Slots
- Integrated 2S and 1P Ports
- 32-bit Integrated Ethernet adapter
- Microsoft Windows NT with License
- Designed and Manufactured in the U.S.A.
- (Monitor not included)

R4000 50/100MHz........$3995
R4400 50/100MHz........$4295
R4400 67/133MHz........$4595
R4400 75/150MHz........$5195

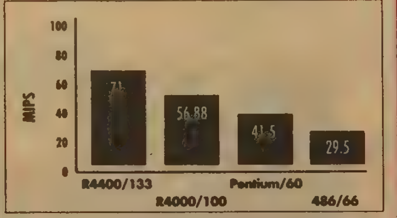
DEC Alpha AXP RISC 166/200MHz-PCI Bus

- 64-bit DEC Alpha AXP RISC Processor
- 166MHz or (200MHz) Processor option
- 256 (512K) External Cache
- 16MB RAM on 64 (128)-bit Memory Bus
- 540MB Fast SCSI-2 8.5ms Hard Drive
- 1.44MB High Density Floppy Drive
- 32-bit PCI Integrated Fast SCSI-2 interface
- 32-bit PCI local Bus Video adapter 2MB VRAM Upgradeable to 4MB 1280x1024 16.7M colors
- Deluxe Baby AT (Full-Tower) Case 250W
- 101 Enhanced Keyboard
- 2-PCI and 3-ISA slots
- Integrated 2S and 1P Ports
- 32-bit PCI Integrated Ethernet adapter
- Microsoft Windows NT with License
- Designed and Manufactured in the U.S.A.
- (Monitor not included)

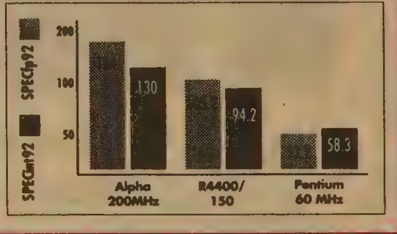
Now Shipping!

DEC Alpha 166MHz.........$5395
DEC Alpha 200MHz.........$6695
Please Call for DEC Alpha on EISA Bus

MIPS R4400/150 vs. Pentium/60



Power Meter benchmarks under Windows NT



OPTIONS AND UPGRADES

NOW will incorporate any component into your next system from us and guarantees its functionality. We offer a wide selection of upgrades and add-on components covering all brand-names and models, (inc. HDs, CD-ROMs, Video Cards, Sound Cards, Tape Back-ups, DATs, Monitors... etc.) So if you need to add, take out or exchange any component in our advertised systems configuration, please call us for a quotation.

NOW ELECTRONICS, INC.

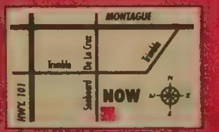
SAN MATEO

TEL: 415/345-4577
FAX: 415/345-4576
2031 Pioneer Court Ste. 2
San Mateo, CA 94403
Hours: M-F 9-6 / Sat. 11-5

HWY. 92
20th
PIONEER CT.
NOW
EL CAMINO
HWY. 101

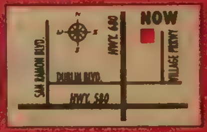
SAN JOSE

TEL: 408/894-7060
FAX: 408/894-7062
2526 Seaboard Avenue
San Jose, CA 95131
Hours: M-Th 9-7 / F 9-6 / Sat. 11-5



DUBLIN

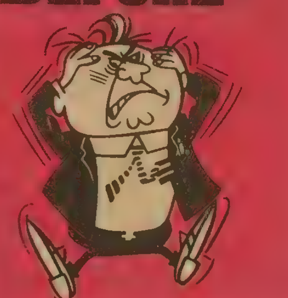
TEL: 510/803-9791
FAX: 510/803-9790
6912 Village Prkwy.
Dublin, CA 94568
Hours: M-F 9-6 / Sat. 11-5



Mr. Wise was Shopping for a Computer!

BEFORE

- Should I buy ISA, EISA, VESA or PCI?
- Should I buy from local, name-brand or mail-(dis)order?
- Do mail order companies help me in future upgrades?
- Why should I wait 4–6 weeks to get my system?
- How come some ads look too good to be true?
- How can I tell I will receive what I ordered?



AFTER

Mr. Wise bought a NOW Computer!

- I paid the right price for the right system
- I was treated as a customer, not a number
- System received on the day I was promised
- Configuration was exactly as I specified
- Warranty and Support were outstanding
- I can count on NOW for future upgrade and help
- I recommend NOW to all my friends

COMMANDER

"Just the right configuration" for "Just the right price" system! Ideal for those who seek a fast, reliable and upgradeable system and are on a tight budget.

i486DX2/66MHz Processor
VESA/ISA Green Motherboard
Diamond Stealth 24 Video

- 66MHz Intel i486DX2 Processor 8K
- ASUS or AIR Green VESA Motherboard
- 8MB 70ns RAM, 256K WB cache
- Western Digital 340MB IDE 12ms HD
- 1.2 and 1.44MB Floppy Drives
- 15" ADI MicroScan 4GP Low Radiation Monitor
- Diamond Stealth 24 VLB Video Card
- Promise Tech. IDE VLB Controller
- Medium-tower Case 230W
- 101 Enhanced Keyboard
- 2-VESA (3 on AIR) and 5-ISA slots
- Pentium OverDrive P24T/CT Socket
- DOS 6.2, Windows 3.11 & Mouse

$1745

Add $350 for 486DX4/100MHz

BEST BUY

GEMINI 17

The Gemini 17 satisfies two of the most desired features in a new PC nowadays; 17" Monitor and PCI Local Bus, while maintaining a very low price that is hard to resist.

ASUS PCI/ISA Motherboard
17" ADI .26dp Flat Monitor
PCI Fast SCSI-2 interface

- 66MHz Intel i486DX2 Processor 8K
- ASUS ISA/PCI Motherboard
- 256K write-back cache up to 512K
- 8MB 72-pin 70ns RAM up to 128MB
- Quantum 340MB SCSI-2 Hard Drive
- 1.44MB Floppy Drive
- 17" ADI MicroScan 5A .26dp Flat Monitor
- PCI Stealth32 Video Card 1MB
- PCI Fast SCSI-2 Controller
- Medium-Tower Case 230W PS
- Focus 2001 Click Keyboard
- 3-PCI, 5-ISA Expansion slots
- Pentium OverDrive P24T/CT Socket
- DOS 6.2, Windows 3.11 and Mouse

$2245

NEW!!!

ASPIRE

For those who have been aspiring for an affordable Pentium system from NOW, the ASPIRE combines the processing power of the Pentium with affordable brand-name components and excellent upgradeability.

Pentium 60MHz Processor
Intel Premiere Motherboard
Diamond Stealth32 Video

- 60MHz Intel Pentium Processor 16K
- Intel Premiere/PCI 64-bit Motherboard
- 8MB 70ns RAM, 256KB WB Cache
- Western Digital 340MB IDE 12ms HD
- 1.44MB Floppy Drive
- 15" ADI MicroScan 4GP Low Radiation Monitor
- PCI Stealth32 2MB RAM Video Card
- PCI Integrated Enhanced IDE Controller
- Medium-Tower Case 230W
- 101 KeyTronic Keyboard
- 2 Serial 16554 UART and 1 Par. Ports
- 2-PCI, 4-ISA and 1-ISA/PCI Slots
- Pentium OverDrive Socket
- DOS 6.2, Windows 3.11 & Mouse

$2345

NEW!!!

HOMEMEDIA

HomeMedia brings your entire family endless hours of entertainment, education and lots of fun. Bundled with the most popular Microsoft CD titles on the market, the HomeMedia is the Ultimate Home PC.

- 66MHz Intel i486DX2 Processor 8K
- ASUS Green VESA Motherboard
- 8MB 70ns RAM, 256K Fast cache
- 340MB IDE 12ms Hard Drive
- 1.2 and 1.44MB Floppy Drives
- 15" ADI MicroScan 4GP LR Monitor
- Genoa 8500VL 1MB Video Card
- Promise Tech VLB IDE Controller
- Medium Tower Case 230W
- 101 Enhanced Keyboard
- DOS 6.2, Windows 3.11 & Mouse
- Toshiba 3401B 2X 200ms CD-ROM
- Sound Blaster 16 w/SCSI-2 Port
- Labtec 550 Amplified Speakers

- 4 Best Microsoft Titles
- Encarta 94 MPC
- Dinosaur MPC
- Cinemania 94 MPC
- Bookshelf 94

$2395

ECONOMY PC

Our Economy PC line is designed for those who need a low level entry system with room for future expansion. Priced at rock bottom prices, below competition, while preserving the high-quality and superior service of NOW!

- Intel i486SX/DX/DX2 Processor
- VESA Local bus Motherboard
- 4MB 70ns RAM, 256K cache
- 210MB IDE 12ms Hard Drive
- 1.2 or 1.44MB Floppy Drive
- 14" SVGA .28dp Non-Int. Monitor
- VESA SVGA accelerator 1MB Video Card
- VESA IDE Controller with Ports
- Mini-tower or Desktop Case 200W
- 101 Enhanced Keyboard
- Pentium OverDrive ZIF Socket

i486SX/33MHz	$999
i486DX/33MHz	$1155
i486DX2/66MHz	$1255
i486DX4/100MHz	$1595

Why Buy NOW?

NOW GUARANTEES YOUR SATISFACTION!

NOW employees are *your* employees. We are dedicated to satisfying our customers, and we are willing to do whatever it takes. NOW offers lifetime technical support (with optional 24 hour toll-free), a post-sale upgrade option, an on-site service option, and a 30 day money back guarantee. NOW is a member of the Better Business Bureau for those interested in checking our service and support history.

NOW CONFIGURES A SYSTEM THAT BEST FITS YOUR NEEDS

At NOW, we view our computer systems as tools – tools that are used to accomplish certain tasks. If the tool is not designed correctly, then the tasks won't be accomplished efficiently. With this in mind, our goal is to build you a system that fits your specific requirements. Don't be fooled by "dirt cheap" or "lowest price" advertisements – call our sales staff and consult with them on a system configuration that fits *your* needs.

NOW IS THE CORPORATE CHOICE

For years, NOW has been supplying the corporate world with state-of-the-art computers and services. Our corporate customers are our business partners – we understand their needs and we go to extremes to satisfy those needs in the most efficient and productive manner possible. Our corporate customers enjoy NOW's outstanding service and support program – a program that is unparalleled in the industry. Our corporate services include (but are not limited to) on-site service, free pick-up & delivery; 24 hour turn-around time for system repairs, temporary loaners for items that are being repaired, and a dedicated sales representative. If you represent a corporation (small, medium or large), give NOW the opportunity to become your system supplier – we won't let you down.

NOW IS A TECHNOLOGY LEADER

For many people, NOW is the source for information about the latest cutting-edge technology. When it comes to being an industry leader, NOW is always ahead of the competition. If you are always on the lookout for the latest technology, read our ads – we keep you ahead of the crowd.

MULTIMEDIA UPGRADE KITS

KIT #1 STARTER KIT $249
- Panasonic 562 dbl spd/320ms
- Sound Blaster Pro Value
- Labtec CS-150 stereo speakers

KIT #2 PROFESSIONAL KIT $479
- Toshiba 3401B/dbl spd/200ms
- Pro Audio Studio 16
- Labtec CS-550 amplified speakers

KIT #3 ULTIMATE KIT $599
- NEC 3Xi triple speed 195ms
- Sound Blaster 16 SCSI-2 port
- Altec Lansing ACS-50 speakers

TERMS AND CONDITIONS

One year parts and lifetime labor. No surcharge for credit cards, most major credit cards accepted. Prices do not include shipping. 15% restocking charges after 30 days. No returns for items missing disks, manuals or packaging. Allow 14 days for a refund. All registered trademarks are trademarks of their respective companies. Not responsible for typographical errors. Prices and specs are subject to change without notice or obligation.

NOW
ELECTRONICS, INC.

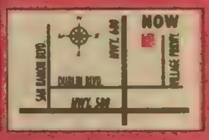
SAN MATEO
TEL: 415/345-4577
FAX: 415/345-4576
2031 Pioneer Court Ste. 2
San Mateo, CA 94403
Hours: M-F 9-6 / Sat. 11-5

HWY. 92
20th
HWY. 101
PIONEER CT.
EL CAMINO
NOW

SAN JOSE
TEL: 408/894-7060
FAX: 408/894-7062
2526 Seaboard Avenue
San Jose, CA 95131
Hours: M-Th 9-7 / F 9-6 / Sat. 11-5

MONTAGUE
Trimble
De La Cruz
Seaboard
HWY. 101
NOW

DUBLIN
TEL: 510/803-9791
FAX: 510/803-9790
6912 Village Prkwy.
Dublin, CA 94568
Hours: M-F 9-6 / Sat. 11-5



Desktop VR Under The Hood

Cyberscope 3D Takes An Unusual Approach

Desktop virtual reality is getting easier and easier, with more software programs and viewing systems to choose from, but it still falls far short of full immersion, where you can move your whole body with the illusion of inhabiting a different, simulated space.

Cyberscope from Simsalabim Systems ("Simsalabim" is a magician's oath like "abracadabra" or "hocus pocus.") is a deceptively simple stereoscopic system for viewing 3-D imagery on the desktop. Before the advent of VR, it would have been enough to describe it just in terms of 3-D, but it does in fact offer an exceptionally sharp and clear sensation of depth, exceeding that of many other VR-oriented programs.

Instead of wearing a head-mounted display or looking at a monitor through 3-D glasses, you install the Cyberscope viewing hood on your monitor. The hood is available in black or white plastic, and the $199 package comes with either DOS or Mac demos. Two mirrors split and rotate the two halves of the display picture 90 degrees into left and right images, resulting in a composite image wider than it is tall.

Because of the 90-degree twist, aligning the Cyberscope is counterintuitive. Sliding it sideways will cause the two images to move up and down, and sliding it up and down will cause the two images to move sideways.

It's up to the software to supply the stereoscopic information. CyberSmash, a wonderful 3-D color version of Breakout, is included as a demo, as is the 3D Slide Show for the Cyberscope.

Even though the Cyberscope may be a bit awkward at first, it really does isolate you from the room environment, making the 3-D experience much more intense. Even with advanced electronically shuttered glasses like those from StereoGraphics, you see the monitor image surrounded by all the interference of the room. Because the Cyberscope is so much an immersive direct-path interface, the image is sharper, the colors deeper and more pure than the mediated and transmitted signals seen through an HMD.

BY TONY REVEAUX

SETTING UP

Installing the Cyberscope system on your computer is not a trivial matter. Its primeval simplicity demands in turn some effort to achieve consistent optical alignment and registration.

Because there are many different monitors out there, the Cyberscope uses Velcro patches at the top and bottom of the frame. This means that each time that you reattach the Velcro, trying to line up the holes in the hood with stick-on dots on the monitor frame, registration may be a bit imprecise.

A good clear help file in the installation software takes you through the steps to align and attach the hood. This is particularly convenient since the minimal manual was based upon the original PC version. With the calibration diagram on the screen, you then hold up the hefty hood and move it around until the left and right positions line up. The manual strongly suggests that you have another person there to mark the position while you hold it.

When you're working within a Cyberscope program, it looks like a normal window with depth. Any other screen image is transformed by the hood viewer mirrors; each half of the screen is split and rotated. This can present a difficulty when you are trying to find and open files on the desktop. Peering through one of the apertures at a skewed portion of the screen, and trying to move the cursor around with any accuracy is like trying to thread a needle with one hand behind your back while the other hand holds a mirror over your shoulder to see it. You have to take the hood off while you do that kind of work and then reinstall it to see in Superscope again. Each time you do that, you probably also throw your registration off.

If someone would write a system extension that translated the Finder desktop to Cyberscope, you could go between programs and navigate without having to take the hood on and off. That would certainly be the desktop metaphor of my dreams—file, folder, and application icons floating at different depths in space.

It isn't mentioned in the documentation, but the best way to work with this particular pocket universe if you are trying to create or develop with it is to have a two-monitor setup. Then you can have one monitor with the hood to view the Superscope documents, and the desktop and menus on the other monitor. Once I fired up my other monitor, a trusty Apple RGB 13, life was a lot less surreal.

VIRTUS VR FOR CYBERSCOPE

Virtus VR is a $99 3-D modeling program for Macintosh. It allows you to invent, explore, and alter realistic 3-D worlds. You can fly around and through full-color planes, solids, objects, and environments that you can build in minutes. You can apply this system to creating models and simulations for anything founded on three-dimensional massing as experienced through time. Home remodeling, commercial space planning, scenic design, scientific representation, legal reenactments, and recreational creativity are just some of the uses it can be put to.

I've been using a beta version of a new release of Virtus VR for the Mac that is VR-enabled. Open a file, and then choose Cyberscope from the bottom of the Walk menu. You will also see choices for Stereo Pairs and HMD. Enlarge the view window of the scene or the object to full screen, and you will see that it is split and turned in the Cyberscope orientation. Install the Cyberscope hood and the image will be in a very convincing geometric 3-D. Virtus VR has to chug a bit to update even on the Mac Centris 650 I'm using, but it really works as a desktop VR experience. And what you see is very sharp and clean.

The problem is that you really need to set up with the hood off. The bigger problem is navigating through the space. Virtus

Instead of wearing a head-mounted display or looking at a monitor through 3-D glasses, you install the Cyberscope viewing hood on your monitor.

POWER WORKSTATIONS

PENTIUM 90MHz SYSTEM

- * Pentium 90 MHz Intel PCI mother board, 256K cache
- * 16MB 64bit Memory, upgradable to 128MB on board
- * 540 MB IDE HDD with built in PCI controller
- * 101 Keytronics Keyboard, 2Serial/1Pararell ports
- * 1.44 and 1.2MB Floppy drives, CPU cooling fan
- * Middle tower case, MS-DOS 6.21 and MS Windows 3.11
- * Free software and hardware Integrations

intel inside

pentium™ PROCESSOR

POWER PENTIUM SYSTEM

COME & SEE OUR DEMO!

Recommended Option(CAD)

*Matrox MGA Pro w/ Z-buffer
for 3D real-time rendering/rotation
*Digitizer(12X12 to 44X60)
*Large size monitor(17" to 37")
*Plotter
-Pen Plotter(A to E size)
-Inkjet Plotter(A to E size)
-Color or monochrome

Recommended Option(Graphics)

*Matrox MGA II+ PCI with 4MB
VRAM(24bit color @1152X882)
*Scanner
-color or monochrome
-Flatbed or 35mm film scanner
*Dye-sub Color Printer
-Economic Fargo Primera
-Best quality Kodak Colorease PS
*Pressure Sensitive digitizer
*17" or 20" SONY monitor
*Additional 16MB or 48MB RAM

Solaris®

NeXT™

***Pentium 90 MHz Intel PCI mother board**
with 256K Write-back second level Cache
***16MB** 64bit Memory, upgradable to 128MB on board
*ATI Mach32 Graphics Card with 2MB VRAM
***Adaptec SCSI-II Controller** with EasySCSI software
***540MB SCSI** Hard Drive, 1.44MB & 1.2MB FDD
***NEC Multispin 3Xi Internal CD-ROM** Drive
(triple speed, 450KB/sec data transfer rate)
*101 Keyboard, Microsoft Mouse, Middle tower case
with cooling fan

***SUN Solaris X86 or NeXT O/S Support**

SunSoft A Sun Microsystems, Inc. Business — X/Open BASE XPG — X

COME & SEE OUR DEMO!

Best Window System Combo.

- * **486DX-66** VLB or PCI Mother board with 256K Cache, Pentium(P24) upgradable
- * **8MB** memory upgradable up to 64MB
- * **420MB** IDE HDD with VLB/PCI controller
- * **Matrox MGA II+** (2MB) Graphics card
- * **17"** Flat screen(72Hz@1024X768)
- * Teac 1.44MB & 1.22 MB Floopy Drive
- * Microsoft mouse & Keytronics 101 K/B
- * MS-DOS Ver 6.21 & Windows Ver 3.11
- * Tower case with CPU cooling fan
- * **Free software integration**

BEST VALUE

$2,695

Kodak Sales and Service

*** Kodak PCD-200 CD-ROM Writer**
Double speed, Store up to 682MB of data
Store text, images, and graphics in ISO9660
Publishing software for Windows or DOS
COME & SEE OUR DEMO! $CALL

*** Kodak PCD-200 CD-ROM Service**
Lowest service price in town !!!
Fast turnaround time. Additional discount on quantity services.

ONLY $99.00 EACH

Upgrade Your 286/386 to fast 486/586 computer System

- * PCI, VLB, EISA, or ISA Mother board
- * Costomize Your System to your needs
- * 256 KB Cache Standard
- * Free Technical Support, Backup
- * Up to 128 MB RAM Support
- * Call us for best pricing

Hercules — 9 — METHEUS — WACOM — intel. — MICROTEK Better Images Through Innovation.

GRAPHICS / PUBLISHING

Kodak

CD-ROM WRITER

PCD Writer 200

- Complete Package for writerable CD-R
- Including PCD Writer 200, SCSI Board
- Publishing software for Windows,EZ SCSI
- 5 writable CD's
- CUSTOM CD SERVICE AVAILABLE

$Call

$99

COME & SEE OUR DEMO!

Kodak

ColorEase Printer

- 300 dpi Dye-sub Color Printer
- 16MB RAM and 120MB Hard Drive
- Adobe Postscript Level 2 built in
- Windows, Macintosh drivers
- AppleTalk, EtherTalk(optional), RS232 Centronics,SCSI interface for external font storage.

COME & SEE OUR DEMO!

$6,195

HEWLETT PACKARD

DesignJet 650C

- 300 dpi, 4MB RAM to 20 MB,fast
- ACAD 10,11,12, and Windows
- HPGL,HPGL/2,Raster(HP RTL) formats
- Postscript option available

$6,995/8,295

COME & SEE OUR DEMO!

InFocus SYSTEMS

Projection Solutions

Complete Presentation

- **PanelBook 450s**:ColorLCD Projection
- **PanelBook 500s**: Active Matrix LCD
- **LiteShow IIs**:Electronic Slide System
- **LitePrl 500s**:Portable Projection
- **7600XGA**:LCD, Color, up to1024X768
- 1600GS/LC:B/W or Color, affordable

$Call

WACOM

Pressure Sensitive

Art Z(6X8)

- With Soft Pressure Sensitive stylus
- Ideal for graphic design and handwriting input

UD-1212(12X12)

$375

- With Firm Pressure Sensitive stylus
- Ideal for CAD, graphic art, desktop publishing

$595

COME & SEE OUR DEMO!

CalComp
A Lockheed Company

TechJET B size InkJet

- Desktop publishing,CAD, Graphics, typesetting, B size spreadsheet
- **360 dpi**, plain paper, transparency film, envelopes, up to 248 cps in draft mode
- **HP-GL**, 907, ADI ACAD 11 & 12, **Windows**,

CALS G4, Epson & IBM 24e emulation, NeWSprint/Sun

$695

COME & SEE OUR DEMO!

Roland DIGITAL GROUP

SIGN MAKERS

- Start your own sign making business today with under $2,500 !!!
- Use from 2" to 48" wide materials
- Sign Maker with Plotter capability
- 3D precision prototype modeler
- Vinyl, rubylith, amberlith films, friskets, sandblasting stencils, reflective vinyl ..

NEW

COME & SEE OUR DEMO!

$Call

TRUEVISION
A RasterOps Company

Targa+ / ATVista

The Best Multimedia

- TARGA+ 16 / 32 / 64
- ATVista 1M / 2M / 4M
- Bravado
- TIPS
- Truevision 1024 / 32

$Call

MONITORS

* 42" Mitsubishi AM4201R	$ Call
* 37" Mitsubishi Pro 37	$ Call
* 33" Mitsubishi Scan 37	$ Call
* 29" Mitsubishi AM2752A	$ Call
* 21" Mitsubishi Pro 21T	$2,295
* 21" NEC 6FGP	$2,045
* 21" Viewsonic 21"	$1,825
* 21" Hitachi Accuview PS21	$2,095
* 21" Nokia 445X	$2,845
* 21" Philips 2120DC	$2,395
* 21" Nanao F760iw	$1,995
* 20" Nanao T660i	$2,095
* 20" SONY GDM20SE	$1,895
* 20" Viewsonic 20"	$1,595
* 20" NSA SuperScan 20S	$1,395
* 17" Mag DX17F	$ 785
* 17" NEC 5FGp	$1,145
* 17" Nanao T560i	$1,525
* 17" Nanao F550iw	$1,025
* 17" Mitsubishi Scan 17FS	$ 995
* 17" Nokia 447B	$985
* 17" Sony GDM 17SE1	$1,145
* 17" Viewsonic 17E	$ 795
* 15" SONY CPD-15FX	$ 455

GRAPHICS CARD

* #9GXI TC Plus L29	$1,495
* #9GXE64 1M/2M	$215/285
* #9GXE64 Pro 2M/4M	$395/595
* Artist WinSprint 1000i	$ 1,195
* Artist WinSprint XJ1000	$1,195
* Hercules Dynamite 1M/2M	$185/245
* Hercules Graphite 1M/2M	$265/375
* Metheus 1104+16/256	$995/1,095
* Metheus Premire 2M/4M	$595/795
* Matrox MGA PCI2+ 2M/4M	$445/645
* Matrox MGA Pro 4.5M / V	$1,095
* Matrox 2M VRAM upgrade	$250
* Matrox MGA Impression 3/V/H	$745
* MediaVision ProGraphics 1280	$695
* MediaVision ProGraphics 1024	$395
* Diamond Stealth 64 2M/4M	$365/495
* Diamond Viper Pro 2M/4M	$425/595
* Vermont Cobra Elite	$995
* Super Mac Spectrum 24	$945
* ATI Pro Turbo 2M/4M	$395/595
* ATI Gurpo 2M	$295
* TrueVision Targa 16/32/64	$ Call
* STB Pegasus VL 4MB	$645
* Ochid Kelvin 64 2MB	$245

PLOTTERS

* Calcomp Drawingmaster Pro	$16,995
* Calcomp Designmate D/E	$1,995/2,995
* Calcomp Techjet D/E	$2,995/3,995
* Calcomp Techjet personal B	$ 695
* Calcomp CCL600 Laser prt.	$3,295
* HP 355 Electrostatic color	$29,995
* HP Designjet 650C/PS E	$9,995
* HP DesignJet 650C D/E	$6,995/8,295
* HP DesignJet 600 D/E	$4,995/5,995
* HP DesignJet 200 D/E	$2,695/3,595
* HP memory 2M/4M/8M	$205/335/625
* HP DraftPro + D/E	$3,195/4,195
* HP 7475A/7550+	$1,495/3,195
* HP Paintjet XL (A-B)	$1,895
* HP Deskjet 1200C	$1,695
* H.I.DMP 162R (A-E)	$4,385
* H.I. HIPLOT 7100 (A-D)	$2,795
* H.I. HIPLOT 7200 (A-E)	$3,495
* H.I. DMP 61/62SP	$1,795/2,395
* H.I. JetPro(A-C)V 50/100	$1,495/1,995
* Enter SP600 (A-B)	$ 695
* Roland SignMaker	$ Call
* Roland GRX350 (A-D)	$3,495
* PacificData InkJet II(A-C)	$1,095

DIGITIZERS

* Calcomp 44 X 60 Drawing Slate	$1,895
* Calcomp 36 X 48 Drawing Slate	$1,695
* Calcomp 18 X 24 Drawing Slate	$1,295
* Calcomp 12 X 18 Drawing Slate	$ 395
* Calcomp 12 X 12 Drawing Slate	$ 245
* Calcomp 12 X 12(P.Sen)	$ 495
* Calcomp Dwg/Slate9X6(P.Sen)	$ 275
* Summa S. MG2 36 X 48	$2,995
* Summa S. MG2 24 X 36	$2,595
* Summa S. FX 12/18	$425/725
* Summa S. III 12/18	$295/$545
* Kurta XGT 12 X 12	$ 395
* Kurta IS ONE 12/17	$345/595
* WACOM 18 X 25 UD	$2,195
* WACOM 12 X 18 UD	$ 795
* WACOM 12 X 12 UD	$ 595
* WACOM Art-Z PC/Mac	$375/345

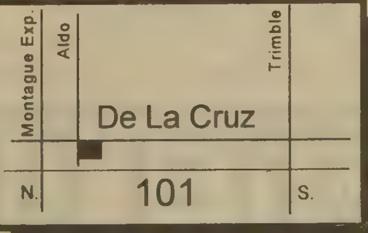
COLOR PRINTERS

* Seiko ColorPoint PSX	$4,995
* Seiko ColorPoint PSE	$2,595
* Mitsubishi S3410 (DyeSub)	$6,995
* Kodak Color Ease	$6,195
* Fargo Primera(Thermal Wax)	$ 795

JEMINI
ELECTRONICS
The house of CAD & Graphics Equipment
Business Hours 8AM-6PM(M-F),10AM-4PM(Sat)

3448 De La Cruz Blvd., Santa Clara, CA 95054
Phone (408)727-9986 Fax (408)727-7687

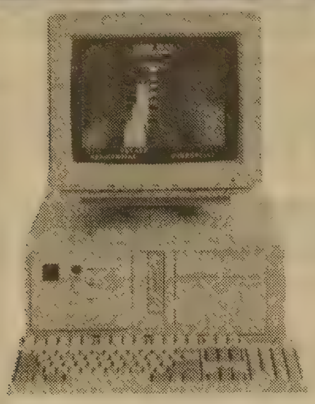
- Price subject to change without notice
- Not responsible for typographical errors
- All trademarks belong to their respective companies



Free Technical Support New Low Price ! Please call for other products

NANAO® CalComp A Lockheed Company Kodak InFocus SYSTEMS HEWLETT PACKARD

BUY DIRECT FROM FACTORY AND SAVE!!!



486VLB System

CHECK IT OUT...

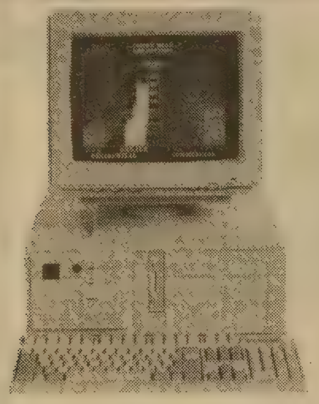
Professionally Built In The U.S.A.

Microsoft Windows Compatible

Other Configurations Available

- BioStar 486 Local Bus Motherboard
- Intel Pentium Technology Ready
- 256K Fast Cache Memory
- 4 MB RAM
- 1.44 Meg 3-1/2" Floppy Drive
- 213 MB IDE Cache Hard Drive 14ms
- 2 Serial, 1 Parallel & 1 Game Port
- 32-bit VLB Super IDE Controller
- Windows Accelerator VLB w/ 1MB
- 14" Super VGA Monitor (1024x768)
- 101 Enhanced Keyboard
- Minitower or Desktop/ 230 Watt P.S.
- Microsoft-compatible Serial Mouse

Cyrix 486DX-33	$856
Cyrix 486DX-40	$869
Cyrix 486DX2-50	$889
AMD 486DX-40	$899
AMD 486DX2-50	$939
AMD 486DX2-66	$949
Intel 486DX2-50	$949
Intel 486DX2-66	$979



Advanced 486 VLB System

CHECK IT OUT...

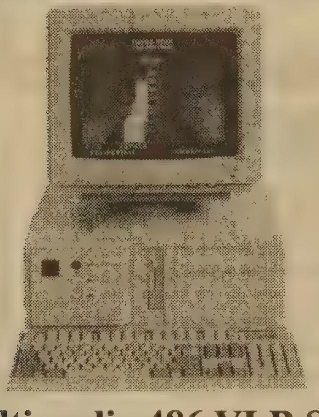
Professionally Built In The U.S.A.

Microsoft Windows Compatible

Other Configurations Available

- AIR or SIS 486 Local Bus Motherboard
- Intel Pentium Technology Ready
- 256K Fast Cache Memory
- 4 MB RAM
- 1.44 Meg 3-1/2" Floppy Drive
- 420 MB IDE Cache Hard Drive 12ms
- 2 Serial, 1 Parallel & 1 Game Port
- 32-bit VLB Super IDE Controller
- Windows Accelerator VLB w/ 1MB
- 14" Super VGA Monitor Non-Int.
- 101 Enhanced Keyboard
- Minitower or Desktop / 230 Watt P.S.
- Microsoft-compatible Serial Mouse

Cyrix 486DX-33	$959
Cyrix 486DX-40	$969
Cyrix 486DX2-50	$989
AMD 486DX-40	$999
AMD 486DX2-50	$1039
AMD 486DX2-66	$1049
Intel 486DX2-50	$1049
Intel 486DX2-66	$1079



Multimedia 486 VLB System

CHECK IT OUT...

Professionally Built In The U.S.A.

Microsoft Windows Compatible

Other Configurations Available

- BioStar 486 Local Bus Motherboard
- Intel Pentium Technology Ready
- 256K Fast Cache Memory
- 4 MB RAM
- 1.44 Meg 3-1/2" Floppy Drive
- 420 MB IDE Cache Hard Drive 12ms
- 2 Serial, 1 Parallel & 1 Game Port
- 32-bit VLB Super IDE Controller
- Windows Accelerator VLB w/ 1MB
- 14" Super VGA Monitor Non-Int.
- 101 Enhanced Keyboard
- Minitower or Desktop / 230 Watt P.S.
- Microsoft-compatible Serial Mouse
- Double Speed CDROM
- Soundblaster 16 MCD

Cyrix 486DX-33	$1159
Cyrix 486DX-40	$1169
Cyrix 486DX2-50	$1189
AMD 486DX-40	$1199
AMD 486DX2-50	$1239
AMD 486DX2-66	$1249
Intel 486DX2-50	$1249
Intel 486DX2-66	$1289

OPTi Pentium VLB System

CHECK IT OUT...

Professionally Built In The U.S.A.

Microsoft Windows Compatible

Other Configurations Available

- OPTi Pentium VLB Motherboard
- 256K Fast Cache Memory
- 8 MB RAM & CPU Cooling Fan
- 1.44 Meg 3-1/2" Floppy Drive
- 420 MB IDE Cache Hard Drive 12ms
- 2 Serial, 1 Parallel & 1 Game Port
- 32-bit VLB Super IDE Controller
- Windows Accelerator VLB w/ 1MB
- 14" Super VGA Monitor Non-Int.
- 101 Enhanced Keyboard
- Minitower or Desktop / 230 Watt P.S.
- Microsoft Serial Mouse

Pentium-60MHz	$1579
Pentium-66MHz	$1699
Pentium-90MHz	$2059

Save 3% on Cash Purchases

TRUECOMP AMERICA

Business Hours
Mon-Fri: 9:30-7:00
Sat: 10:00-6:00

1264 So. Bascom Ave
San Jose, CA 95128

1937 Tully Road
San Jose, CA 95122

PIXEL U.S.A.

Tel:(408)292-8889 Fax:(408)292-6199 DISCOVER NOVUS MasterCard VISA **Tel:(408)929-7218 Fax:(408)929-724**

*Price, term, availability subject to change without notice. Not responsible for typographical errors. All brand names are registered trademarks of their respective owners.

THE TRUE CHOICE FOR YOUR COMPUTING NEEDS.

CHECK IT OUT...

Professionally Built In The U.S.A.

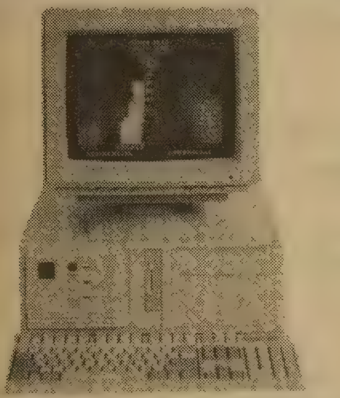
Other Configurations Available

OPTi Pentium PCI System

- OPTi Pentium PCI Motherboard
- 256K Fast Cache Memory
- 8 MB RAM & CPU Cooling Fan
- 1.44 Meg 3-1/2" Floppy Drive
- 420 MB IDE Cache Hard Drive 12ms
- 2 Serial, 1 Parallel & 1 Game Port
- 32-bit PCI Super IDE Controller
- Orchid Kelvin 64 PCI w/1MB
- 14" Super VGA Monitor Non-Int.
- 101 Enhanced Keyboard
- Minitower or Desktop / 230 Watt P.S.
- Microsoft Serial Mouse

Pentium-60MHz	**$1659**
Pentium-66MHz	**$1789**
Pentium-90MHz	**$2219**

All Systems Come With One Year Parts & Labor Warranty



CHECK IT OUT...

Professionally Built In The U.S.A.

Other Configurations Available

INTEL Pentium PCI System

- INTEL Pentium PCI Motherboard
- 256K Fast Cache Memory
- 8 MB RAM & CPU Cooling Fan
- 1.44 Meg 3-1/2" Floppy Drive
- 420 MB IDE Cache Hard Drive 12ms
- 2 Serial, 1 Parallel & 1 Game Port
- 32-bit PCI Super IDE Controller
- Orchid Kelvin 64 PCI w/1MB
- 15" Acer Super VGA Monitor Non-Int.
- 101 Enhanced Keyboard
- Minitower or Desktop / 230 Watt P.S.
- Microsoft Serial Mouse

Pentium-60MHz	**$1869**
Pentium-66MHz	**$1999**
Pentium-90MHz	**$2229**

We Will Match or Beat Any Price!

ViewSonic®

14" 6E .28 NI (1024x768)	$268
15" 15EX .28 NI (1280x1024)	$359
17" 17E .28 NI (1280x1024)	$698
17" 17G .28 NI (1280x1024)	$778
17" 17 .28 NI (1600x1280)	$868
20" 20 .28 NI (1600x1280)	$1478
21" 21 .25 NI (1600x1280)	$1628

Acer

14" AcerView 34T .28 NI (1024x768)	$248
15" AcerView 56V .28 NI (1280x1024)	$348
17" AcerView 76I .28 NI (1280x1024)	$598

ADI

14" 3G .28 NI (1280x1024)	$288
14" 4G .28 NI (1280x1024)	$358
17" 5A .26 Low-Rad. NI (1280x1024)	$678

KFC

14" SVGA .39 Interlaced (1024x768)	$179
14" SVGA .28 Interlaced (1024x768)	$199
14" SVGA .28 NI (1024x768)	$209
15" SVGA .28 NI (1280x1024)	$299
17" SVGA .26 NI (1280x1024)	$629

Impression®

14" SVGA .39 Interlaced (1024x768)	$168
14" SVGA .28 Interlaced (1024x768)	$198
14" SVGA .28 NI (1024x768)	$208
15" SVGA .28 NI (1280x1024)	$298

SAMPO AMERICA

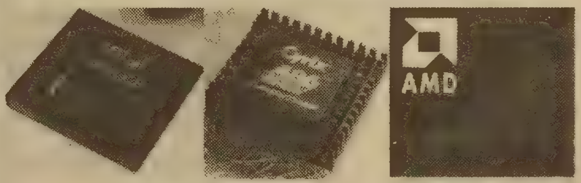
15" 1566 .28 NI (1280x1024)	$348

SONY.

15" GPD-15SF .25 NI (1024x768)	$438
17" GDM-17SE1 .25 NI (1600x1280)	$928
20" GDM-20SE1	$1799

NANAO

17" F550I .28 NI (1024x768)	$869
17" F550IW .28 NI (1024x768)	$899
17" T560I .25 NI (1280x1024)	$1369
17" F560IW .26 NI (1280x1024)	$1179
20" T660I .30 NI (1280x1024)	$1929



CPUs

Intel 486SX-25MHz	$67
Intel 486SX-33MHz	$84
Intel 486DX-33MHz	$218
Intel 486DX2-50MHz	$218
Intel 486DX2-66MHz	$258
Intel 486DX4-100MHz	$Call
Intel Pentium-60MHz	$428
Intel Pentium-66MHz	$548
Intel Pentium-90MHz	$698
Cyrix 486SX-40MHz	$79
Cyrix 486DX-33MHz	$128
Cyrix 486DX-40MHz	$138
Cyrix 486DX2-50MHz	$158
Cyrix 486DX-50MHz	$228
AMD 486DX-40MHz	$158
AMD 486DX2-50MHz	$208
AMD 486DX2-66MHz	$238

Memory

1 X 3-70ns (3-chips)	$35
1 X 9-70ns (9-chips)	$39
4 X 9-70ns (3-chips)	$129
4 X 9-70ns (9-chips)	$135
1 X 36-80ns (4Mb)	$139.95
1 X 36-70ns (4Mb)	$149.95
2 X 36-70ns (8Mb)	$299.95
2 X 36-60ns (8Mb)	$315.95
4 X 36-70ns (16Mb)	$538
4 X 36-60ns (16Mb)	$568

WIDE VARIETY OF BRAND NAME PRODUCTS

Motherboards

AMI

Super Voyager III VLB w/256K Cache	$328
Enterprise IV EISA w/256K Cache	$448

BIOSTAR GROUP

386DX-40 w/128K Cache	$83
486VLB w/256K Cache (30-pin)	$79
486VLB w/256K Cache (30 & 72-pin)	$82
P5-60/66MHz PCI w/256K Cache	$238

intel

PCI P5-60/66 MHz / IDE&IO built-in	$308
PCI P5-90 MHz w/ IDE & IO	$378

SIS

SIS 471 486 w/256K (30 & 72-pin)	$108
SIS 471 486 w/256K (72-pin only)	$108
SIS 471 486 w/256K (72-pin & DX4 support)	$128

AIR

SH 486 VLB w/256K	$95
MI 486 VLB w/256K / IDE & IO built-in	$168
MIS 486 VLB w/256K / IDE,SCSI,&IO built-in	$208
VP 486 VLB/PCI w/256K / IDE & IO built-in	$188

IBM

VLB 486SLC2-66MHz w/64K + 387SX	$208
VLB 486SLC2-66MHz Plus w/64K + 387SX	$258
VLB 486BL-75MHz w/256K + 387DX	$288

Genoa
SYSTEMS CORPORATION

Turbo Express 486 VLB w/256K (72-pin)	$108
Turbo Express 486 PCI w/256K (72-pin)	$188

Video Cards

ISA VESA Local Bus PCI

SVGA 512K	$34
Windows Accelerator 5420 w/1Mb	$54
Diamond Stealth VRAM	$88
VLB Trident 9400 w/1Mb	$64
VLB Cirrus Logic 5426 w/1Mb	$64
VLB Cirrus Logic 5428 w/1Mb	$68
VLB S3-805 w/1Mb	$78
VLB ET4000-32i w/1Mb	$108
PCI ET4000-32p w/1Mb	$118

ORCHID

VLB Kelvin EZ w/1Mb	$98
VLB/PCI Kelvin (1Mb/2Mb)	$125/$165
VLB Celsius (1Mb/2Mb)	$118/$158

Hercules

VLB Stingray w/1Mb	$118
VLB/PCI Dynamic Pro w/2Mb	$208
VLB/PCI Graphic Power w/2Mb	$298

SPiDER.
Graphics, Inc.

VLB Spider+ w/1Mb	$95
VLB Spider 256K w/1Mb	$125
VLB Spider 64 (2Mb/4Mb)	$168/$259
PCI Spider 64 (2Mb/4Mb)	$168/$259
VLB Black Widow VRAM (1Mb/2Mb)	$168/$228
PCI Black Widow VRAM (1Mb/2Mb)	$168/$228
VLB Tarantula 64 DRAM (2Mb/4Mb)	$288/$Call
PCI Tarantula 64 DRAM (2Mb/4Mb)	$288/$Call
VLB Tarantula 64 VRAM (2Mb/4Mb)	$Call/$Call
PCI Tarantula 64 VRAM (2Mb/4Mb)	$Call/$Call

ATI
Perfecting the PC

VLB Graphics Ultra Pro w/2Mb VRAM	$228
PCI Graphics Ultra Pro w/2Mb VRAM	$248
PCI Graphics Pro Turbo 64 w/2Mb	$298
PCI Graphics Pro Turbo 64 w/4Mb	$488

matrox

MGA PCI/2+2Mb	$418
MGA PCI/2+4Mb	$Call

Genoa
SYSTEMS CORPORATION

VLB 8500VL w/1Mb	$85
VLB Phantom 32i w/2Mb	$168
PCI Phantom 32p w/2Mb	$178
VLB Phantom 64	$Call

DIAMOND
Computer Systems, Inc

VLB SpeedStar Pro w/1Mb	$95
VLB Stealth 24 w/1Mb	$128
VLB/PCI Stealth 32 (1Mb/2Mb)	$168/$208
VLB Viper SE w/2Mb VRAM	$268
PCI Viper SE w/2Mb VRAM	$268
PCI Viper w/2Mb VRAM	$298
VLB/PCI Stealth 64 w/2Mb DRAM	$308

Number Nine

9GXe64VLB w/2Mb DRAM	$229
9GXe64PCI w/2Mb DRAM	$229
9GXe64 Pro VLB w/2Mb VRAM	$339
9GXe64 Pro PCI w/2Mb VRAM	$339
9GXe64 Pro VLB w/4MB VRAM	$499
9GXe64 Pro PCI w/4Mb VRAM	$499

Hard Drives

CONNER

CFA-210A 210Mb 14ms IDE	$159
CFA-340A 340Mb 14ms IDE	$199
CFA-420A 420Mb 12ms IDE	$208
CFA-540A 540Mb 12ms IDE	$288
CFA-810A 810Mb 12ms IDE	$Call
CFA-1080A 1.08Gig 10ms IDE	$529
CP30540 540Mb 12ms SCSI-2	$358
CP1060s 1.0Gig 10ms SCSI-2	$Call

Quantum

LPS540AT 540Mb 12ms IDE	$298
LPS540S 540Mb 12ms SCSI	$328
PC1080s 1.0Gig 10ms SCSI-2	$648
E2100s 2.1Gig SCSI-2	$Call

WESTERN DIGITAL

WD-1210 213Mb 14ms IDE	$168
WD-2340 340Mb 13ms IDE	$198
WD-2420 420Mb 12ms IDE	$228
WD-2540 520Mb 12ms IDE	$298
WD-2700 700Mb 10ms IDE	$428
WD-3100 1Gig 10ms IDE	$569

MICROPOLIS

MC-4110 1.06Gig 8.5ms SCSI-2	$638
MC-2217 1.75Gig 10ms SCSI-2	$888
MC-1926 2.0Gig 11ms SCSI-2	$1388
MC-1936 3.0Gig 11ms SCSI-2	$1988

Maxtor

7345A 345Mb 14ms IDE	$188
7546A 540Mb 12ms IDE	$278
MXT-540A 540Mb 8.5ms IDE	$338
7345S 345Mb 14ms IDE	$258
MXT-540S 540Mb 8.5ms SCSI	$418

FUJITSU

M2694ESA 1.0Gig 10ms SCSI-2	$619

Controllers

IDE Only	$9
IDE w/IO (2S/1P/1G)	$13
IDE w/IO (2S 16550, 1EPP, 1G)	$35
IDE VLB w/IO (2S/1P/1G)	$16
IDE PCI Only	$18

TYAN

Tyan 1345 IDE VLB 4HD/2FD w/IO	$18
Tyan 1342 IDE VLB 4HD/2FD w/16550 IO	$45

PROMISE

Promise IDE VLB 420 w/512K & IO	$98
Promise IDE 4030VL-II Caching VLB	$98

adaptec

1542CF SCSI-2 w/o Kit(OEM)	$158
1542CFK SCSI-2 w/Kit(OEM)	$188
2842VL SCSI-2 w/Kit(Retail)	$238
2940 PCI SCSI-2 w/Kit(OEM)	$190
2940 PCI SCSI-2 w/Kit(OEM)	$268
2742 EISA SCSI w/o Kit	$188
2742 EISA SCSI w/Kit	$279

BUSLOGIC

BT-445S VLB SCSI-2 w/Kit	$195
BT-946C PCI SCSI-2 w/Kit	$248
BT-757S Fast-Wide SCSI w/Kit	$368

DATA TECHNOLOGY CORPORATION

IDE VLB 2278 w/2S/1P/1G	$18
IDE VLB 2277 Cache (0->16Mb)	$108
SCSI 3280 ISA	$88
SCSI 3270 VLB	$108
SCSI 3290 Eisa Cache (0->4Mb)	$248

TRUECOMP AMERICA

Business Hours
Mon-Fri: 9:30-7:00
Sat: 10:00-6:00

1264 So. Bascom Ave
San Jose, CA 95128

1937 Tully Road
San Jose, CA 95122

PIXEL U.S.A.

Tel:(408)292-8889 Fax:(408)292-6199 DISCOVER NOVUS MasterCard VISA **Tel:(408)929-7218 Fax:(408)929-7244**

BEST PRICE AND SERVICE IN THE BAY AREA!!!

CDROM

SONY

CDU-33A Double Speed	$118

MITSUMI

Mitsumi Double Speed (250ms)	$128

Panasonic

Panasonic CR-522 Single Speed	$59
Panasonic CR-563 Double Speed	$128

TOSHIBA

XM-3401B Dbl Spd SCSI (200ms)	$258

NEC

NEC 510 Triple Speed SCSI (190ms)	$329
NEC 3Xi Triple Speed SCSI (190ms)	$398

Sound Cards

CREATIVE
CREATIVE LABS, INC.

SoundBlaster Pro Value Edition	$74.95
Soundblaster 16 Basic	$99.95
Soundblaster 16 MCD	$119
Soundblaster 16 MCD w/ASP	$165.95
Soundblaster 16 SCSI-2	$129
Soundblaster 16 SCSI-2 w/ASP	$199.95
Soundblaster AWE 32	$269.95
Game Blaster CD16 Package	$365.95

MEDIA VISION

Pro Audio Spectrum 16 (OEM)	$79

MEDIA MAGIC

ISP-16	$58

Tape Drives

COLORADO MEMORY SYSTEMS INC.

Jumbo 250 Internal	$158
Trakker 250 External	$Call

CONNER

250 Mb Internal	$149
250 Mb External	$Call

Mice

3-buttons Serial	$6.99
Logitech 2-buttons Serial	$14.99
Logitech Dexxa Serial	$14.99
Logitech First Serial	$25.99
Logitech Mouseman Serial	$24.99
Logitech Mouseman Bus	$35.99
Logitech Portable Serial	$29.99
Microsoft Ergonomic Serial	$22.99
Microsoft Ergonomic Bus	$55.99
Qtronix Trackball	$19.99

Floppy Drives

EPSON

1.44Mb High Density 3-1/2"	$32
1.2Mb High Density 5-1/4"	$43
1.44 & 1.2 Combo	$88

MITSUMI

1.44Mb High Density 3-1/2"	$32
1.2Mb High Density 5-1/4"	$43

TEAC

1.44Mb High Density 3-1/2"	$36
1.2Mb High Density 5-1/4"	$45
1.44 & 1.2 Combo	$99

NEC

1.44Mb High Density 3-1/2"	$32
1.2Mb High Density 5-1/4"	$43

Cases

Minitower Case w/230 Watt P.S.	$35
Desktop Case w/230 Watt P.S.	$38
Compact Medium Tower w/230W	$48
Medium Tower w/230 Watt P.S.	$58
Large Tower w/250 Watt P.S. (4bay)	$75
Large Tower w/250 Watt P.S. (6bay)	$88
Black Minitower w/230 Watt P.S.	$55
Black Medium w/230 Watt	$88

Save 3% on Cash Purchases

Modems

2496 Wang External Faxmodem	$29
Complete Communicator 2400	$75
Etech 14.4 Internal Faxmodem	$68
GVC 2400 Internal Modem	$25
GVC 14.4 Internal Faxmodem	$69
GVC 14.4 External Faxmodem	$99
Supra Express 14.4 Int. Faxmodem	$75
Supra Express 14.4 Ext. Faxmodem	$119
Supra 28.8 Int. Faxmodem	$179
Supra 28.8 Ext. Faxmodem	$239
USR Sportster 14.4 Int. Faxmodem	$109
USR Sportster 14.4 Ext. Faxmodem	$129
USR Sportster 28.8 Int. Faxmodem	$199
USR Sportster 28.8 Ext. Faxmodem	$209
Intel 14.4 Internal Faxmodem	$118
Intel 14.4 External Faxmodem	$129

Keyboards

Mitsumi Enhanced 101	$15
Maxiswitch Enhanced 101	$25
Keytronic Enhanced 101	$28
NMB Enhanced 101 Click	$45
Focus 2001 Enhanced 101	$35
Focus P9000 Click	$55
Fujitsu Enhanced 101	$38
101 Enhanced w/Trackball built-in	$55

Accessories

CD-Caddy	$3.98
CPU Cooling Kit w/Heat Sink & Fan	$6.98
CPU Cooling Kit w/Heat Sink & Fan (Pent.)	$13.95
Power Center (Surge Protector)	$14.95
Speakers (5 Watts)	$7
Speakers (25 Watts)	$35
Speakers (80 Watts)	$55
MSDOS 6.22 (OEM)	$35
MS Windows 3.11 (OEM)	$45
All Cables Or Gender Changer	20%off
All HP Cartridges	20%off

HEWLETT PACKARD Printers

HP560C Color InkJet
$539

HP4L Laser 300dpi
$639

HP4P Laser 600dpi
$959

HP4MP Laser Postscript 600dpi
$1339

Terms & Conditions:

- Financing Available
- Excellent Customer Service & Tech Support
- 24-Hour Turnaround Time On Service

TRUECOMP AMERICA

Business Hours
Mon-Fri: 9:30-7:00
Sat: 10:00-6:00

PIXEL U.S.A.

1264 So. Bascom Ave
San Jose, CA 95128

1937 Tully Road
San Jose, CA 95122

el:(408)292-8889 Fax:(408)292-6199 DISCOVER NOVUS MasterCard VISA **Tel:(408)929-7218 Fax:(408)929-7244**

rice, term, availability subject to change without notice. Not responsible for typographical errors. All brand names are registered trademarks of their respective owners.

ALL 100% GUARANTEED PARTS

WE WON'T BE UNDERSOLD!

WE ARE YOUR BEST SOURCE FOR COMPONENTS

WE WILL TRADE YOUR OLD MEMORY FOR NEW

SIMM MODULES

IBM COMPATIBLE	
4M X 9-80/70	$135/145
4M X 9-60	115
1M X 9-10/80	35/40
16 X 9-70	599
1M X 9-70/60	43/47
1M X 3-10/80	34/36
1M X 3-70/60	37/39
256 X 9-10/80	8/10
256 X 9-70/60	12/13
MEMORY SIMMS	CALL

APPLE/MAC

1M X 8-10/80/70	$34/39/42
4M X 8-80/70/60	135/142/145
16 X 8-70	579

DRAM

1M X 1-80	$\$4^{99}$
1M X 1-70	5^{50}
1M X 1-60	5^{99}
1M X 4-80/70	CALL
256K X 1-80	1^{65}
256K X 1-70	1^{80}
256K X 1-60	1^{95}
256K X 4-80	5^{00}
256K X 4-70	5^{50}
256K X 4-60	5^{75}

INTEL CPU'S

PENTIUM 66 INTEL	$750
PENTIUM 60 INTEL	599
486DX4-100 INTEL	639
486DXII-66 INTEL	299
486DXII-50 INTEL	249
486DX-50 INTEL	329
486DX-33 INTEL	299
486DX-25 INTEL	179
486SX-25 INTEL	79
486SX-33 INTEL	109
386DX-33 INTEL	45
386DX-25 INTEL	25
386DX-20 INTEL	22

AMD CPU'S

486DX-40	$219
486DX2-50	239
486DX2-66	259
386DX-40	49

3% CASH DISCOUNT!

EPROMS

27C20-15NS	$\$7^{50}$
27C10-15NS	5^{50}
27C040-15NS	12^{50}
5104402-80/70 (1X4) SST,ZIPP	21
5104400-80/70 (1X4) ZIPP	19/21
5104400-80/70 (1X4) DIPP	21/27
5104400-80/70 (1X4) SOJ	16/18
5104400-8/70 (4X1) SOJ	15/17

MOTHERBOARD WITH CPU

PENTIUM P5-90/512K PCI+ VLB USA	$1269
PENTIUM P5-90/256K PCI INTEL	1299
PENTIUM P5-90/256K VLB	1239
PENTIUM P5-66/256K PCI	999
PENTIUM P5-60/256K VLB	899
PENTIUM P5-66/512K VLB	939
PENTIUM P5-60/512K VLB	863
486DX4-100/256K VLB	719
486DX2-66/256K PCI+VLB	499
486DX-33/256K PCI+VLB	389
486DX2-66/128K ISA/VLB	410
486DX-50/128K ISA/VLB	429
486DX-33/128K ISA/VLB	309

SUN MEMORY

SPARC SLC	4MB	$179
3/60,80,4/40,60,65	4/16MB	179/699
SPARC 1 & 1+, 1PC	4/16MB	179/699
SPARC 10	16/64MB	619/CALL
SUN CLASSIC	16MB	619
SPARC SERVER 630NP	64MB	CALL
SUN, IPX, ELC	4/16MB	179/699
SPARC II	16MB	699

HARD DRIVES

MAXTOR	
245 MB 15MS 3.5" IDE	$229
340 MB 15MS 3.5" SCSI	259
340 MB 15MS 3.5" IDE	289
340 MB 15MS 3.5" SCSI	329
540 MB 8.5MS 3.5" IDE	409
540 MB 8.5MS 3.5" SCSI	559
WESTERN DIGITAL	
250 MB 12MS 3.5" IDE	$239
340 MB 12MS 3.5" IDE	289
540 MB 10MS 3.5" IDE	499
1.0 GB 10MS 3.5" SCSI	799
1.37 GB 10MS 3.5" SCSI	849
SEAGATE	
1.0 GB 9MS 3.5" SCSI-2	$799
2.1 GB BARRACUDA 9MS 3.5 SCSI-2	1939
QUANTUM	
240MB 3.5" IDE	$209
240 MB 3.5" SCSI	259
270 MB 3.5" SCSI	279
340 MB 3.5" IDE	309
540 MB 3.5" IDE	449
1.2 GB 3.5" SCSI-2	1095

OPEN M-F 8:30-5:30
SAT 10:30-2

CACHE MEMORY

32X8-25	$\$4^{00}$
32X8-20	5^{00}
32X8-15	5^{50}
64X4-20	5^{75}
64X4-25/15	$6^{75}/9^{.75}$
64X4-20/25	$9^{80}/6^{59}$

72 PIN SIMMS

2MB 604-80/70ns	$79/89
4MB 1X36-80/70ns	155/169
4MB 1X36-60ns	159
8MB 2X36-80/70ns	289/309
16MB 2X36-80/70ns	599/619
16MB 4X32-80/70ns	589/599

MATH CO'S

387DX 16-33 INTEL	$49
387DX INTEL	40
387SX 25,20,16	CALL
387DX 33,25,20 CYRIX	43
4167-33 WEITEC	399
4167-25 WEITEC	299
3167-33 WEITEC	99
3167-25 WEITEC	89
80487SX ALL SPEEDS	199
80487SX-20 OVERDRIVE	289
80487SX-25 OVERDRIVE	CALL
80487SX-33 OVERDRIVE	CALL
80486DX-25 OVERDRIVE	299
80486DX-33 OVERDRIVE	399

LASER PRINTER MEMORY

HP II &IID, CANON LBP-811 & LBP-811R, OLIVETTI PG 108 & PG 208 1/2/4MB BOARD	$97/129/199
HP IIP, III, IIID 1/2/4MB BOARD	97/129/199
IBM 4019 & 4019B 1/2/4MB BOARD	105/139/299
IBM 2029e 1/2/4MB	75/99/175
TI MICROLASER & MICROLASER PS 1MB	85
PANASONIC KX-P4420, KX-P44501 1/2/4MB BOARD	129/157/229
EPSON EPL-6000; TOSHIBA PAGELASER 6; PACKARD BELL PP9500; FACIT P6060; MANNESMAN TALLY 905; AT&T 593 LASER; NCR 6435 LASER 1/2/4MB BOARD	155/160/260

IBM/MAC MEMORY INSTALLATION $15

TEL: 408-577-1100
FAX 408-577-1300
2229 RINGWOOD AVE.
SAN JOSE, CA 95131

NEW LOCATION

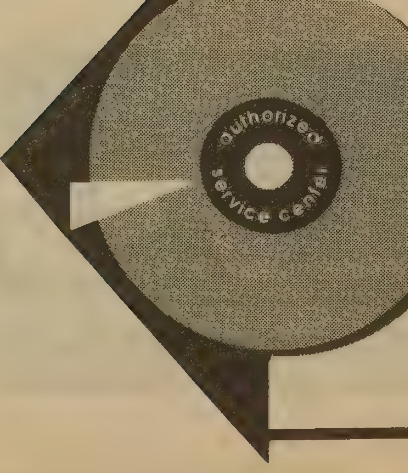
MasterCard VISA

IMD INTERNATIONAL MODULE DESIGN, INC.

ASK ABOUT OUR SYSTEM LEASE PROGRAM

IMD offers complete satisfaction with every transaction. Same day shipping. Prices subject to change without notice. All trademarks are the property of their respective owners.

DATA RECOVERY



Drives • Tapes • Optical Media

We offer service on multiple platforms - DOS, Novell, Macintosh, UNIX, XENIX, Banyan, OS/2, Sun, Bernoulli and More!

Our custom data recovery increases your chance for a successful recovery. Our specialized techniques include:

- Class 100 Clean Room
- Proprietary Software Tools
- Recovery of Hard Drives, Tapes and Optical Media
- Novell Netware Fixtures/Software Tools
- Data Protection Safeguards

GIGABYTES

TEL: (510) 440-8032 FAX: (510) 440-9099

Digital Telephony

continued from page 32

"to/from/subject" lines of electronic mail. Previously, they only needed a subpoena, a kind of "trust us, we really need this" effort that now at least makes them show "specific and articulable facts" before being granted access to such information.

But even this "intermediary" protection isn't enough for EPIC's Banisar, who said such court orders can be signed by "low-level bureaucrats." He would have liked to see the most stringent test for this data—probable cause—be required.

No More Secrets

For years there's been a quiet give and take between the telephone industry and law enforcement when it came to wiretaps. The Feds (or your local sheriff) showed up with a court-ordered wiretap and Mr. Telephone would comply. Any problems? They were solved right there at the tap. No hassles. No public debate. And once a year, the FBI would publish its wiretap figures and everyone would go back to "catching bad guys."

That all changes now.

The Attorney General is required to publish, in the Federal Register, estimates of how many wiretaps will be needed, both state and local. This, says EFF's Berman, "gives us a chance to question the figures beforehand."

Also, the standards process for implementing the wiretap statute must be public. The standards will be open to public scrutiny. And in fact, if you don't like what's happening, "any person" can bitch to the FCC about the wiretap standards. The FCC in turn, will be required to open a hearing on the matter.

Openness is all well and good on its face, but if it doesn't win you anything, what good is it really? "What difference does it make if I'm shot in the back or in the front?" says EPIC's Banisar.

Fight The Good Fight

The bill, as it stands, will pass. That's the word on the Hill. There will be hearings on the bill August 11 to flesh out some clarifications. For example, the telephone industry isn't happy that they'll be required to pay billions to comply with this bill's requirements but are only given $500 million to start with. So, they'll have to fight for every extra penny of appropriations that Congress will eventually pony up. Big deal, everyone fights for government money these days.

There's an old saying that there are two things in this world you can always count on: Death and Taxes.

Make that Death, Taxes, and Digital Wiretapping. Meeks out... ■

CyberWire Dispatch, copyright © 1994 by Brock N. Meeks. CyberWire Dispatch is posted every few days in the Wired conference on the WELL and distributed widely on noncommercial Internet sites.

THIS LIST IS NOT OUR LOWEST PRICES...

Our Price Is Always Negotiable, We Beat Competitors Prices On Every Item, Every Day!*

Why United Micro is Your No. 1 Choice? Brand Names, High Quality & The Lowest Price!

486 MULTIMEDIA COLOR NOTEBOOK

- 4MB RAM
- 172MB HD (Options: 258/340MB)
- VESA 32-Bit Local Bus/1MB Video
- Built-In Speakers and Microphone

SX-25/ DX-33.....$1980/ 2160
DX2-50/ DX-66...$2190/ 2300

TRIPLE/ DOUBLE SPEED MULTIMEDIA KIT

- NEC Triple Speed/Panasonic 562-B CD-ROM
- Sound Blaster 16 SCSI/16 Basic
- Stereo Amplified Speakers
- Cable & Software Driver
- 5 Bundled CD Titles Encyclopedia Etc.

$529/$289

SYSTEM

SYSTEM	MB+CPU We Offer You More Cache Than Our Competitors	Basic System (See Below)	Basic System 170MB HDD SVGA Card SVGA Monitor	Basic System 210MB HDD SVGA Card SVGA Monitor 4MB RAM (250MB + $30)	Basic System 250MB HDD SVGA Card SVGA Monitor 4MB RAM 1.44 & 1.2 F/D (340MB + $30)	Basic System 420MB HDD SVGA Card SVGA Monitor 4MB RAM 1.44 & 1.2 F/D (540MB + $77)
PENTIUM P5-90/256K CACHE VLB	$1109	$1399	$1589	$ 2019	$2079	$2129
PENTIUM P5-66/256K CACHE VLB	$999	$1247	$1407	$1849	$1907	$1977
486DX4-100/256K CACHE VLB	675	839	1217	1247	1297	1457
486DX2-66/256K CACHE VLB	329	499	899	1049	1109	1169
486DX2-50/256K CACHE VLB	275	487	847	997	1087	1137
486DX-40/256K CACHE VLB	245	399	817	959	999	1039
486DX-33/256K CACHE VLB	235	369	759	899	959	989
486SX-33/256K CACHE VLB	175	337	699	847	889	939
486SLC2-66/64K CACHE VLB	195	339	715	887	949	1027
IBMBL-75/256K CACHE VLB	299	449	837	987	1077	1127
486DLC-40/128K CACHE ISA	139	297	657	807	897	947
386DX-40/128K CACHE ISA	85	247	607	757	847	897
386SX-40 ISA	55	227	587	737	827	877

BASIC SYSTEM (Assembled in USA) **Motherboard & CPU, 1 MB Memory, Cache Memory, Deluxe Mini-Tower Case w/Power Supply, 101 Enhanced Keyboard, 1.44 MB Floppy, IDE/IO Controller w/2HD/2FD/2S/1P/1G Ports**

POPULAR CD TITLES

EDUCATION

Compton's Interactive Encyclopedia	$39
Dinosaurs Encyclopedia	15
Mayo's Clinic Family Health Book	16
Microsoft Bookshelf	29
Microsoft Word	29
Mother Goose	14
Multimedia Audobons Birds/Mammals	14
Macmillan Dictionary	17
National Geographic Mammals	18
Playing With Language English/Spanish	19
National Parks	15

GAMES

Arthur's Teacher Trouble	$19
Beauty & The Beast/Sleeping Beauty	14
The 7th Guest	25
Return To Zork	17
Carmen San Diego	17
Kings Quest V	14
Strike Eagle F15	19
Monkey Island DOS	15
Jones In Fast Lane	14
Star Wars Chess MPC	19
Who Killed Sam Ruppert	16
Willy Beamish	15

ADULT

Sakura	$13
Hot Shareware	13
LA Traviata	13
Hot Cars & Girls	13
Original Hot Night	13

A LOT MORE BUNDLED TITLES COMING IN

FLOPPY & HARD DRIVES

Teac 1.44MB	$34
Teac 1.2 MB	43
Teac Combo-1.2/1.44 MB	94
120 MB IDE	137
170 MB IDE	157
210 MB IDE	165
250 MB IDE	175
340 MB IDE	196
420 MB IDE	207
540 MB IDE	279

MONITORS

14" SVGA 1024 .39 Int	$179
14" SVGA 1024 .28 Int	195
14" SVGA 1024 .28 NI	206
IMPRESSION:14" INT/NI	$209/225
ACER: 14" Int/NI	$219/230
CTX:	
14" SVGA 1024 .28 Int/NI	$215/232
15" CMS1561 1024 NI/1561LR	312
17" CPS1760 1280 NI	605
VIEWSONIC:	
6E (14") 15E (15")	$264/350
NEC, SONY	LOWEST

VIDEO CARDS

SVGA 512K/1MB	$35/49
Windows Accel 1 MB	54
Trident VL 1 MB	65
Cirrus Logic VL 1 MB	65
Spider VL 1 MB/PLUS	94/99
Genoa VL 1 MB/Phantom 2MB VLB	87/159
Diamond Stealth 1 MB 24/32 VLB	135/156
Diamond Stealth 64 VLB/PCI	305
Orchid Fahrenheit 1 MB PCI	127

FAX/ MODEM

96/24 S/R Fax/Modem	$34
144/144 Fax Modem (Int)	62
144/144 Fax/Modem (Ext)	102
U.S. Robotics 14400 Fax/Modem	99
192/192 Fax/Modem (Int)	123

MULTIMEDIA

Mitsumi CD ROM Double Speed	$125
Panasonic CD ROM-562B Double Speed	133
Toshiba CD ROM Double Speed	247
NEC CD ROM Triple Speed	319
Sound Card	47
Sound Blaster Pro Deluxe	72
Sound Blaster 16 Basic/MCD	89/99
Sound Blaster Basic SCSI 2	145
Stereo Speakers 1.5W/40/50/80W/120W	5/25/35/57/79

PROCESSORS/ MEMORY

486DX CPU	LOWEST
486DLC CPU	LOWEST
SIMM 1 MB/4MB 30/72 Pin	LOWEST
387DX/40/33/25	28
387SX/33/25	28
Cache RAM	LOWEST

CALL FOR ITEMS NOT LISTED

KEYBOARDS/ MICE

101 Enhanced Keyboard	$13
Smart 101 Enhanced	17
Keytronics 101 Enhanced	23
Focus 2001 (Click)	30
Focus 9000 Programmable	48
MS Compatible Mouse	6
Logitech Mouse	29
Microsoft Mouse	24

CASES

Mini Tower w/200W PS	$34
Desktop w/200W PS	43
Mid Tower w/230W PS	57
Full Tower w/230W PS	74
Power Supply	27

MISCELLANEOUS

IDE w/2S/1P/1G	$11
IDE VL w/2S/1P/1G (2HD/2FD)	17
IDE VL w/2S/1P/1G (4HD/2FD)	35
VLB IDE/IO w/16550 High Speed I/O (4HD/4FD)	43
Tape Back-Up 250 MB (Colorado)	142
CPU Cooling Fan	8

NETWORK

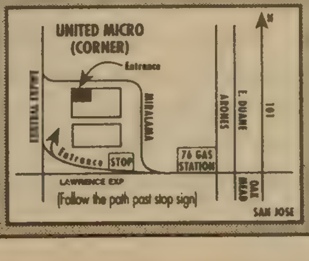
16 Bit Ethernet Card	$32
Cable	LOWEST
Netware 3.12 5/10/25	575/1350/1999
Netware 4.01 5/10/25	790/1799/2300
Netware Start Kit (Card, Cable & Software)	195

UNITED
Your Technical Partner

UNITED MICROSYSTEMS, INC.

TEL: (408)737-8267 Fax: (408) 737-8268

1180 MIRALOMA WAY, #L, SUNNYVALE, CA 94086 MON-SAT: 9am-7pm SUN: BY APPOINTMENT
1 Year Parts & 2 Years Labor Warranty on Systems, Prices and Company Policy Subject To Change Without Notice.
Not Responsible for Typographic Errors. *Negotiable Lowest Price Offer Limited To The Cash Price, Quantities 2 or More, and Stock Availability.



Accounting...*continued from page 62*

software, except allow the user to separately assign transactions to departments or jobs—a stark omission. It pays bills, reconciles checking accounts, and prepares budgets.

The investment module appears to be particularly strong, reflecting the commissions MYM earns when you trade securities online. But as with Quicken, MYM doesn't compute the average cost of mutual fund shares for tax purposes. Who knows what, if anything, these vendors were thinking when they omitted this feature. I never much cared for doing the computation by hand, and clients don't like paying for it.

MYM has much of Quicken's "look and feel," just as Wendy's French fries resemble McDonald's. It seamlessly integrates with a variety of other programs, letting you compute taxes, and you can use your modem to pay bills, do banking, get stock quotes, and buy and sell securities. It also includes an appointment calendar, a to-do list builder, and various other goodies.

The program is easy to install and use. MYM also offers a conversion utility, Quicken Import. But although MYM promises that you can "upgrade easily," the conversion is time-consuming; each Quicken account must be separately imported and exported. Moreover, some types of Quicken data, such as payee lists and investment information, can't be imported at all.

In The Black

The philosophy behind In the Black (ITB) is to give the consultant everything needed for accounting, billing, and contact management in one package. Although priced as personal accounting software, ITB approaches the next notch up, handling payables and generating invoices. The descriptive fields of the invoices, however, are limited in length and the format appears more closely suited to selling merchandise than professional services.

ITB's claim to fame is its contact management capability. It makes little sense to have an accounts receivable function that only generates bills and records payments, without using that same database to keep track of prospective clients and contacts. ITB, recognizing this deficiency in low-end accounting software, built contact management into its package.

This capability is especially useful for independent contractors and consultants needing a convenient way to generate mailing lists and track callers and prospects who aren't yet clients.

To manage these functions, ITB is built around an advanced (R:Base) database engine, and is thoughtfully integrated to take advantage of its database capabilities. In the Black not only tracks departmental activities, as does Quicken, but additionally tracks sub-departments as well. If accounting control procedures are an issue, ITB is designed to leave an audit trail, which is part of your system of internal control.

Kiplinger's CA-Simply Money

Computer Associates took a novel approach to marketing Kiplinger's CA-Simply Money by giving it away for just the cost of shipping and handling, $6.95.

The design of Simply Money is also novel, taking the graphical interface further than any other Windows personal accounting package I've seen. It makes extensive use of icon buttons that you drag around the screen. For example, to pay a bill, you would drag a checking account icon to the write-check icon. To record a check deposited in your credit union, drag the check icon to that credit union account icon. To set up a new account, drag the account icon and drop it on the setup icon. No debits and credits to mess with here!

As with MYM, Simply Money has snazzy portfolio management capabilities, letting you track gains and losses, dividends, margin interest, and security prices. But like the others, it won't compute gains and losses on mutual funds by the average cost method, so you may be overpaying your taxes.

When you need a report with Simply Money, guess what? You click an icon. There are over fifty predefined and customizable reports. Simply Money also generates graphs and has many "ease-of-use" features. The program memorizes all your transactions for quick recall, and a protective option keeps you from cluttering your pop-up lists with one-time payees. Overall, ease-of-use is remarkable, especially if you're partial to mice.

RESOURCES:

Managing Your Money, $79.95
MECA Software, Inc.
P.O. Box 912
Fairfield, CT 06430-0912
(203)255-1441

Kiplinger's CA-Simply Money, $6.95
Computer Associates International, Inc.
One Computer Associates Plaza
Islandia, NY 11788-7000
1-800-373-3666

Quicken, $69.95
QuickBooks, $159.95
Intuit Inc.
P.O. Box 3014
Menlo Park, CA 94026
1-800-624-8742

In the Black, $89.95
Microrim, Inc.
15395 S.E. 30th Pl.
Bellevue, WA 98007
1-800-628-6990

The Step Beyond Personal Accounting Software

Although these packages are all inexpensive, your time may not be. If you're seeking a specific feature, call the vendor before investing a lot of trial and error in the software.

The key aspect of personal accounting software is its simplicity. So resist the temptation to buy more than you need. A package costing more is not necessarily worth more to you if its complexity is so burdensome that it hinders more than helps.

If you aim to keep it simple, but need a few more features and capabilities than offered by personal accounting packages, consider entry-level business accounting software. These are more expensive but also more powerful. Most are sufficiently intelligent to perform the variety of accounting tasks needed by small businesses. Their capabilities, though, vary considerably, so you'll need to review the features thoroughly.

A recent discussion comparing and critiquing entry-level accounting software appears in the Journal of Accountancy (June 1994). The article, by three accounting professors at California State University, Fullerton, also lists resources for obtaining additional information, so you can ensure important criteria are not overlooked. If you'd like a reprint (with permission from the American Institute of Certified Public Accountants), please call my office at (510)893-5753. ■

Copyright © 1994 by David A. Simon, CPA. All rights reserved.

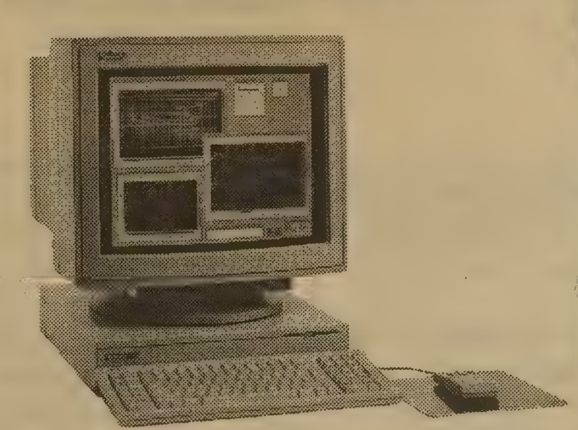
The authors and publisher assume no responsibility for use or content of this article. Your professional tax or legal advisor should be consulted on such matters as they apply to your situation.

WE SELL QUALITY, RELIABILITY, SERVICE & TECHNOLOGY!

SPARC Compatible Workstation

16 MB RAM, 540 MB Hard Drive, 15" Color Monitor, Solaris 2.3

SS2/40	$3875	SS5/85	$5085
SS10/30	$4915	SS10/40	$5075
SS10/41	$6135	SS10/50	$5535
SS10+/50	$5685	SS10/51	$7045
SS10+/61	$8185	SS20	CALL



Notebook Computer

- *Local Bus VGA
- *Built-in Sound Card/Speaker
- *PCMCIA Type III
- *Upgradable CPU
- *Optional Portable Desktop Docking

4MB RAM, 250 MB HDD

MODEL	MONO	DUAL SCAN	ACTIVE MATRIX
•486SX-33	$1545	$2050	N/A
•486DX2-50	$1755	$2260	$3190
•486DX2-66	$1875	$2380	$3315
•PENTIUM-66	N/A	$3455	$4380

***SPECIAL 486SX/25 4MB RAM/120MB HDD........$1111**

PC-To-UNIX Connection

PC/Link (TCP/IP, NFS, FTP, Telnet, DOS TAr & Print Routing	$95
X-Kit/DOS (PC/Link+32-bit XServer for DOS)	150
X-Kit/WIN(PC/Link+32-bit XServer for Windows)	170
X-Net (A WINSTOCK compliant TCP/IP, NFS, Tape Back-Up & XServer)	195
Frontier Super TCP/IP For Windows	225
Novell Lanworkplace	305
Novell Lanworkgroup 5 User	1110
SUNSELECT PC/NFS DOS/WINDOWS	325
NetManage Chameleon TCP/IP For Windows	375
AGE Xoftware/32 for Windows	285
NCD PC-XWare for Windows	470

ONE YEAR ON-SITE SERVICE!

UNIX FOR PC

Yggdrasil plug and play Linux	$29
Yggdrasil Linux Bible	35
TransAmerictech Linus/BSD	20
Prime Time Freeware for UNIX	55
Prime Time Texcetera	55
InfoMagic Internet(TCP/IP,SNMP,FTP,PPP)	19
InfoMagic Source Code(4.3 BSD,MACH,GNU)	19
InfoMagic UNIX(386BSD,NetBSD,FreeBSD)	19
Motif 1.2.3 for Linux	139

SunSoft (Interactive) UNIX:

Interactive UNIX/386 Base Solution (2 User)	$315
Interactive UNIX/386 Network Solution (2 User)	695
Interactive UNIX/386 Graphics Solution (2 User, Tape)	895
Interactive UNIX/386 Software Development System	555
Solaris 2.1 Desktop for x86	525
Solaris 2.1 Workgroup Server for x86	1375
Solaris Driver Developer's Kit for x86	225
Solaris 2.1 for x86 ProWorks C	975
Solaris 2.1 for x86 ProWorks C++	1455

SCO UNIX (ODT):

SCO Open Desktop 3.0 (CD-ROM)	$835
SCO Open Server Enterprise System (CD 16 User)	1535
SCO Open Desktop Development System	1255
SCO Open Server Network System (CD 16 User)	1325
SCO UNIX (2 User)	415
SCO UNIX (16 User)	905
SCO UNIX Development System	905
SCO TCP/IP for SCO UNIX	395
SCO NFS for SCO UNIX	625

Univel UnixWare:

UnixWare Personal Edition (CD ROM/Tape)	$165/195
UnixWare Software Development Kit & Utilities	85
UnixWare Application Server	910
UnixWare Server Merge for Windows	290
UnixWare NFS	155
UnixWare C2 Auditing	155
UnixWare On Line Data Manager	1755
* UnixWare Personal Edition + SDK	240
XFree 86 210 For UnixWare	30

Networking

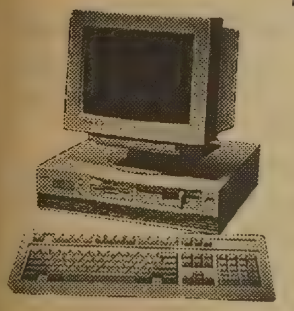
Novell Netware 3.12 (5/10/50)	595/1275/2395
Novell Netware 4.0 (5/10/50)	825/1675/3175
NE-2000 Compatible 16-bit Ethernet Card Combo (Novell Certified)	45
10 BaseT 8 Port Hub	145
10 BaseT 12 Port Intelligent Hub	395
SMC (Western Digital) 16-bit Ethernet Card (Coax/10BaseT)	120/125
SMC/NE2000 16-bit Compatible Ethernet Card	70
Pocket LAN Card	99
3 Com 3C509 Ethernet III	105
Intel Ether Express (Combo)	105

Ready-To-Run Turnkey Solution

(Including Hardware/Software Installation, Training)

- *Netware/UNIX Server
- *Internet EMAil Server
- *Accounting
- *Real-Estate (Residential, Apartment, Commercial)
- *Restaurant (English/Chinese)
- *Sales Tool

Our CNE Team Will Keep Your LAN In Good Working Order & Increase Productivity



PENTIUM/486 UPGRADABLE LOCAL BUS SYSTEMS

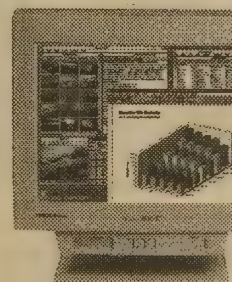
Guaranteed To Run UNIX, OS/2, Windows NT, Novell, PICK

PENTIUM/90 MHz PCI/VLB	$2290
PENTIUM/66 MHz PCI	2125
PENTIUM/66 MHz VLB	1985
486/100 MHz VLB	1830
486/75 MHz VLB	1720
486/66 MHz VLB	1510
486/33 MHz VLB	1385
UPGRADE 486 VLB TO PCI	Add $75
IBM BLX3/75 MHz (64 Cache)	1480
IBM 486SLC/66 (64K Cache)	1355

- 256K Cache, 8 MB RAM
- Mini Tower Case w/230W UL PS
- 420 MB HD, Teac 1.2 & 1.44 MB FD
- PCI or VLB IDE Controller with 2S/1P
- Local Bus 1MB SVGA Card
- 15" .28 NI SVGA Monitor
- Microsoft Serial Mouse
- Keytronics 101-Key Keyboard

IDEK MF-8167 17" Monitor

- •17" Flat Screen
- •.26mm Dot Pitch
- •1600x1200 @ 66 Hz
- •1280x1280 @ 80 Hz
- •Microprocessor Controlled
- •Low Radiation
- •Energy Star Auto-Size
- •3 Years Warranty



$795

Monitor & Video Cards

Cardex ET4000 VLB 1MB	$95
Cardex ET4000/W32PVLB 1/2MB	115/165
Orchid Kelvin VLB 1MB	145
ATI Ultra Pro 1MB/2MB	125/235
Diamond Stealth 64 2/4MB VRAM	325/480
14" SVGA (.28mm) Monitor	210
15" NI Monitor NEC Tube (72Hz)	299
ADI 17" (1280x1024 .26mm Dot Pitch)	720
Hitachi 20" (1280x1024 .31mm Dot Pitch)	1335

Tape Back-up Options

Archive 2150S SCSI 1/4" Tape Drive	$330
Archive 2525S SCSI 1/4" Tape Drive	515
Wang DAT 3100 2GB DAT Drive	995
Wang DAT 3200 4-GB DAT Drive	1055
Exabyte 8205 5-10 GB 8mm Tape Drive	2275
Exabyte 8205 2 GB 8mm Tape Drive	1475

Hard Drive & Controllers

Adaptec 2940 PCI SCSI Controller	$275
Adaptec 2842 Local Bus SCSI Controller	265
Adaptec 1542C SCSI Controller	175
Adaptec 2742A EISA SCSI Controller	295
Bus Logic 4455S Local Bus SCSI Controller	225
Bus Logic 946S PCI Controller	290
420 MB IDE Hard Drive	220
520 MB IDE/SCSI Hard Drive	310/330
1.0 GB IDE/SCSI Hard Drive	635
1.2 GB SCSI Hard Drive (10ms)	899
2 GB SCSI Hard Drive (9ms)	1080
External Hard Disk For Sparc/PC/Mac	Add 75

Motherboards

Pentium 90MHz (PCI) w/256K Cache	$399
Pentium 66 MHz (PCI) w/256K Cache	365
Pentium 66 MHz (VLB) w/256K Cache	240
486DX/100 (VLB) w/256K Cache	99
486DX/100 (PCI) w/256K Cache	175

Multimedia-FREE Installation

CD-ROMS		SOUND CARDS	
NEC 3xi (SCSI)	$345	Gallant 6000 (16-Bit)	99
Panasonic CR562 (AT BUS)	140	Sound Blaster 16 Basic	95
Sony 33A (AT BUS)	140	Sound Blaster 16 ASP	175
Mitsumi (AT BUS)	140	Sound Blaster SCSI II	145
Toshiba XM3401 (SCSI)	270	Sound Blaster SCSI II/ASP	210
CD-ROM Ext. Kit	60	CD TITLES	CALL

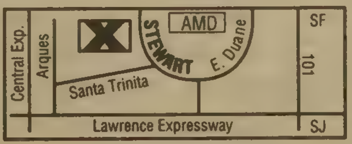
Some Of Our Satisfied Customers:

- AMD
- Cadence
- DCA
- Ford
- Fujitsu
- IBM
- ISSI
- Lockheed
- McDonald Douglas
- Microsoft
- Quantum
- San Jose State
- Santa Clara Univ.
- Stanford Univ.
- Winbond

Since 1990

PromoX Systems

The Network/UNIX/X/Windows Solutions Provider



Tel: (408) 733-2966
Fax: (408) 733-2968
E-Mail Address: promox@cup.portal.com
Hours: Mon-Fri 9-6 Sat 10-4
1008 Stewart Dr., Sunnyvale, Ca 94086
Prices Subject To Change w/o Notice

Sparc registered trademark of Sparc International Inc.

Internet

continued from page 78

you emphasize his middle name, but participants in networking, UNIX, standards, or internationalization are likely to know his name. He's one of the founders of both DKUUG (the Danish UNIX system User's Group) and DKEUnet (the Danish part of EUnet), and he invited us to stop in and talk for an afternoon, so John and Gretchen did.

About thirty people came. We figured them as both UNIX and network literate, and they were. We gave them a core dump of four hours of every slide we brought to Europe, from global growth rates to per country and per capita host counts, from host maps to server maps, from the Matrix at large to the inside of the Internet by latencies. They ate it all up and asked by far the best questions of the summer.

No terminal room, but EKEUnet let us read and send our mail.

San Francisco (June 19)

Smoot previewed our Practical Internetworking tutorial at Sun User Group. Lovely city; lots of panhandlers.

Oslo (June 21–22)

An astute group of about fifty people, who knew what they wanted. NUUG (the Norwegian UNIX system User's Group), led by Jon Petter Bjerke and Andreas Hope, had done a good translation of our Practical Internetworking workshop description, and there wasn't so much confusion about platforms (UNIX vs. DOS) or network protocols (IP vs. NetWare) as at InterOp. Not many questions, perhaps due to a need to concentrate on the foreign language of English, and conceivably also due to Norwegian taciturnity. But we applied the InterOp lesson of sticking to the plan at all costs, and the attendees professed themselves pleased with the result.

No terminal room, but NUUG had a Sun and a PC on a dialup PPP link to the Internet, and some demonstrations and mail exchange were had.

London (June 23–24)

The Information Highway conference, organized by Peter Judge and Sue Day of Technology Appraisals, Ltd., was an interesting event, with about seventy people; smaller than the similar conference TIC sponsored in Austin. Several of the usual crew were presenting. Ole Jacobsen of InterOp was John's session chair. John's talk had the title "A Tour of the Matrix" and he shamelessly used the word "tour" as an excuse to present almost every transparency he brought to Europe, but in twenty-five minutes, not four hours. Judging by the ensuing questions, it worked.

Glenn Kowack, CEO of EUnet, was another obvious member of the usual crew, and his presentation, along with that of Fearghas McKay (which we unfortunately missed, due to schmoozing in the hall with Glenn) and Mark Gibbs, elicited an observation that the attendees were divided into three groups, as follows.

1) The net participants, such as those so far mentioned, who presented ad lib and with almost reckless enthusiasm for their subject, which was unabashedly the Matrix and the Internet.

2) The representatives of large institutions, such as government agencies or telephone companies, who expressed careful approval mixed with prudent caution, producing predictions of real use of networking services, not necessarily over IP, in two to five years.

3) The paying audience (and they paid more than £900 or about $1300, for two days) of MIS (management information services) directors and CEOs (chief executive officers) of companies from small to very large.

We have to wonder which version of reality the paying attendees believed. The two versions don't actually conflict as much as it might seem. This is especially fortunate, since the same three categories of people were also discernible at most of these conferences. ■

Copyright @ 1994 by John S. Quarterman, Gretchen K. Phillips, and Smoot Carl-Mitchell. All rights reserved.

Back to School...

continued from page140

things simpler for new buyers, but focuses Apple's efforts on fewer items. So far, this summer's desktop products have been very good, notably the new 68040-based PowerBooks and Quadra/Performa/LC 630 models. If the company makes enough of these to fill demand, releases a 100MHz Power Mac, and cuts prices a little, I think this fall will be great for the company.

The last major strategic hurdle is the biggest: successfully licensing the Macintosh operating system and basic hardware design. From the rumors in July, Apple may be proceeding quite cannily toward a potentially lucrative arrangement with several non-US computer companies. If this is how Apple goes, I think they may get bruised in public opinion but laugh all the way to the bank.

• Leonard Rosenthol, BMUG programming SIG member and Aladdin Systems techno-guy

If your student tends to lose things easily, choosing a notebook computer may be a problem.

I've had a number of thoughts about it, and depending on the day and the situation my opinions change.

I look at it this way: You've got a company with a lot of good talent, even considering all the great people that have left in the past year, and plenty of good technology. But there is no "direction."

They really need someone at the helm who understands the marketplace and the technologies. Hmmm...I wonder where I should send my resume! ■

Copyright © 1994 by David Morgenstern. All rights reserved worldwide.

WHAT IS BMUG?

BMUG is an educational, nonprofit consumer advocacy group organized to share information and provide critical direction to users and developers in the computer community worldwide. It is an independent advocate, not affiliated with any manufacturer, delivering trustworthy information and useful products.

Like any growing organization, it is many different things to its fifteen thousand international membership. BMUG supports many special interest groups (SIGs), 18-line Planet BMUG and 11-line BMUG Boston BBSes, a software library, weekly meetings, publications, and much more. BMUG also puts out a semi-annual 500-page book that we call our "newsletter."

Our motto continues to be: We're in the business of giving away information.

Come and join in the dialogue at the BMUG main meeting every Thursday evening, 6:30 to 9:30 (or whenever we finish), on the U.C. campus. BMUG West and BMUG South are monthly meetings held in San Francisco and San Jose. Check the Announcement Line at (510)549-2684 ext. 8.

The BMUG Office, 2055 Center St. (a half block from the BART station), is open to the public 8:30 a.m. to 4:30 p.m. Please come by, say hello, and meet other members.

The BMUG Helpline provides volunteer technical assistance and telephonic hand-holding for our members. If your question can't be answered on the spot, we try to get you in touch with someone who can help. Improve your Macintosh education and help others by becoming a Helpline volunteer!

BMUG has one of the most up-to-date, comprehensive software libraries around with hundreds of disks filled with the latest versions of public domain or shareware programs. BMUG also produces CD-ROM collections, including the digital video TV-ROM™ Too, and the BMUG PD-ROM.

Planet BMUG and BMUG Boston are graphical user interface FirstClass bulletin board systems, offering the latest in shareware, as well as news, private email, rumors, etc. With our 18-line capability, you can have access to BMUG almost twenty-four hours a day. It's easy to use, fun, and a great resource.

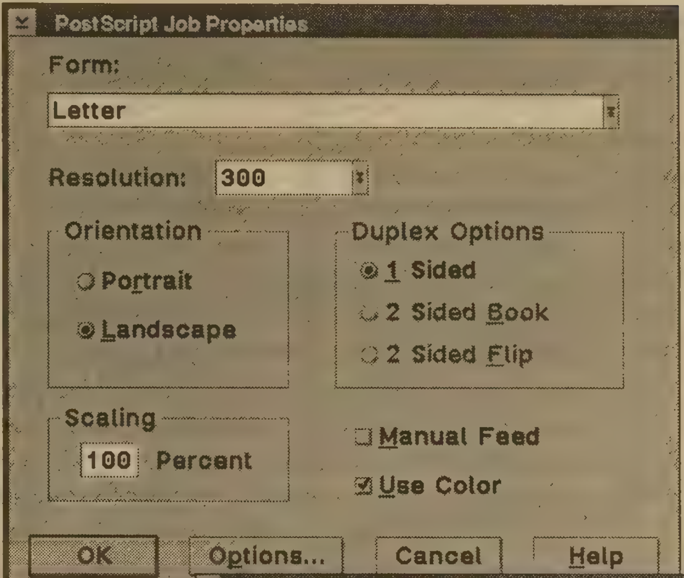
BMUG can be found on most online services, including eWorld. BMUG can also be reached through the Internet network through UG0001@applelink.apple.com.

To get some further information about BMUG please write to: BMUG, 1442A Walnut St., #62, Berkeley, CA 94709. If you prefer to phone our business office, call (510)549-BMUG, or fax (510)849-9026.

OS/2 *continued from page 88...*

driver does not offer any color control (Figure 1A). The PCL driver does have some such options (Figure 1B).

Lotus advised that "the best results for color matching from the screen to paper is to set the Custom Color Halftone settings for all the options listed as Cluster, and set the Vividness and Lightness options to +50%." I did not fool too much with the various settings, but the little I did validated Lotus's own experience: "On some [slide colors] the red is rather brownish but with a presentation file it prints relatively vivid. The blue is more purplish; most of the colors seem to print darker no matter what the driver is set to."



PostScript Job Properties

Form: Letter

Resolution: 300

Orientation
○ Portrait
● Landscape

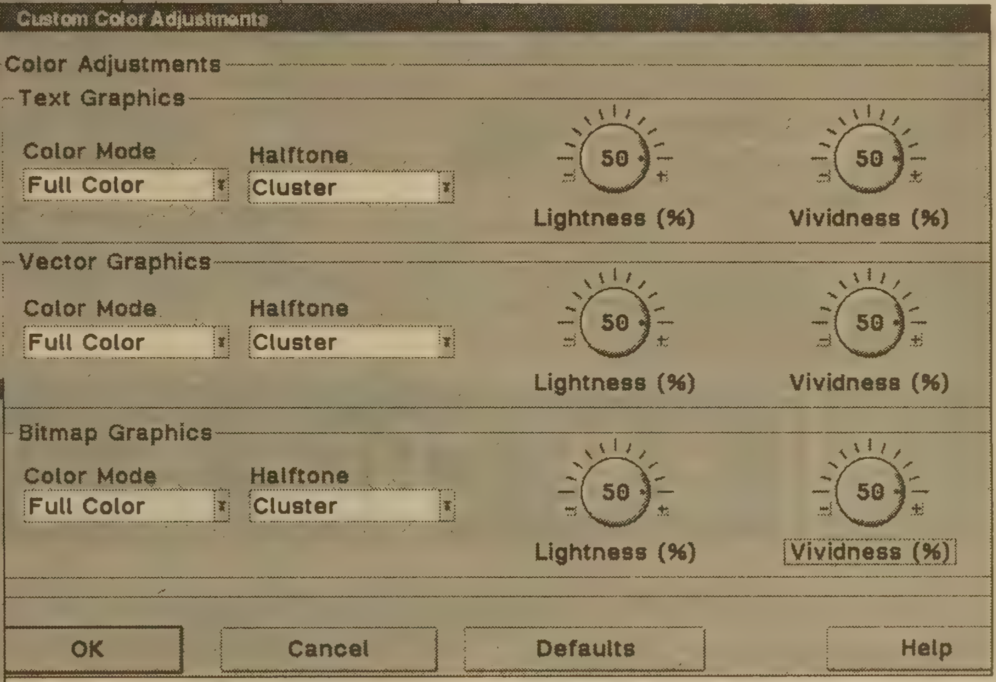
Duplex Options
● 1 Sided
○ 2 Sided Book
○ 2 Sided Flip

Scaling
100 Percent

☐ Manual Feed
☑ Use Color

Figure 1A ▲

Figure 1B ▶



Custom Color Adjustments

Color Adjustments

Text Graphics
Color Mode: Full Color
Halftone: Cluster
Lightness (%): 50
Vividness (%): 50

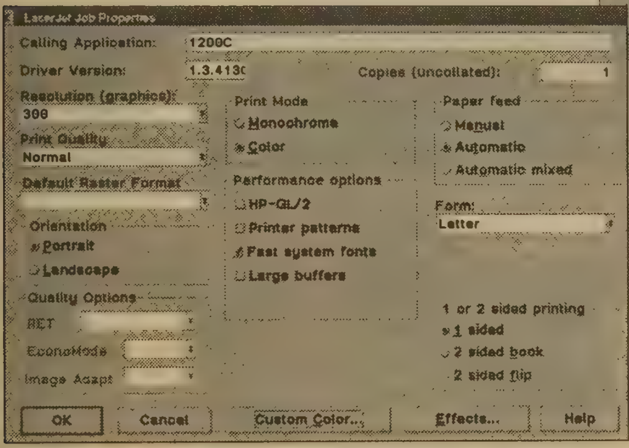
Vector Graphics
Color Mode: Full Color
Halftone: Cluster
Lightness (%): 50
Vividness (%): 50

Bitmap Graphics
Color Mode: Full Color
Halftone: Cluster
Lightness (%): 50
Vividness (%): 50

There was no significant difference in performance between the two drivers; in both cases it was in the two- to three-minute range, suggesting that, indeed, with vector and Type 1 fonts PS performance becomes as good as PCL performance with bitmap images. Print quality in PS mode seemed a tad better than in PCL mode, which would be more noticeable with full-page slides.

There were, however, two problems. In PCL mode much of the light bullet text on dark background would not print; even that part of the text that did print was darker and somewhat less clear than in PS mode. Even odder was the fact that the bullets themselves, which had the same colors as the missing text, did print well. And in both modes the slides containing imported metafiles came out blank!

I got the same result when I printed the slides full page. For the bullet slides the output and quality varied with the driver and the color. For example, several slides had a quite severe pattern of vertical bands in the PCL mode, but so did a few in PS mode, although in a less pronounced manner. With certain colors, however, the print quality was excellent, without any bands.



LaserJet Job Properties

Calling Application: 1200C
Driver Version: 1.3.413C
Copies (uncollated): 1
Resolution (graphics): 300
Print Quality: Normal
Default Raster Format:

Orientation
● Portrait
○ Landscape

Quality Options
RET
EconoMode
Image Adapt

Print Mode
○ Monochrome
● Color

Performance options
☐ HP-GL/2
☐ Printer patterns
☑ Fast system fonts
☐ Large buffers

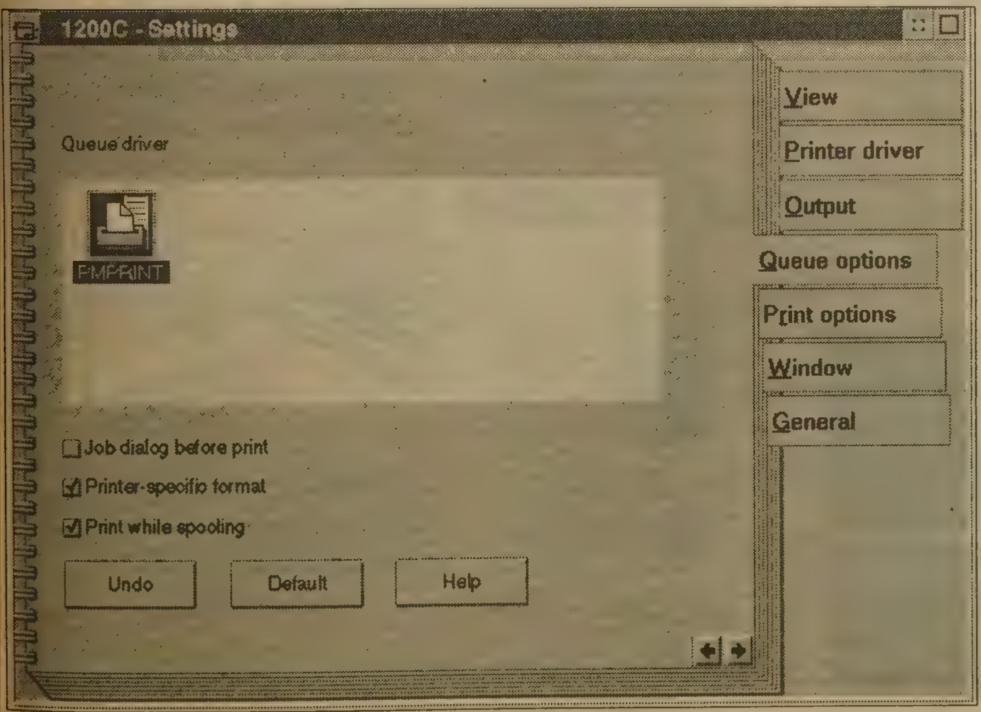
Paper feed
○ Manual
● Automatic
○ Automatic mixed

Form: Letter

1 or 2 sided printing
● 1 sided
○ 2 sided book
○ 2 sided flip

◀ Figure 2

Figure 3 ▼



1200C - Settings

Queue driver

PMPRINT

☐ Job dialog before print
☑ Printer-specific format
☑ Print while spooling

Problem Resolution

First, I contacted Lotus. They suspected the OS/2 drivers and referred me to IBM.

After quite a few iterations I managed to get through to a knowledgeable OS/2 printer specialist (what IBM calls level 2 support). Regarding the dark colors, IBM intends to add user color control to the drivers at a future, unspecified date. The slow PS performance with bitmap images such as the OS/2 desktop was reported to the driver development team and they will look into it. To avoid the missing bullet text problem, a workaround was suggested: check off the HP-GL option of the PCL driver settings (Figure 2).

IBM was able to replicate the problem of blank metafile slides and processed a fix request for it. In the meantime they suggested a workaround: on the Queue Options page of the PCL print object notebook check "Printer-specific format" (Figure 3). This does resolve the problem for full-page slides—the print quality was very good, and there were no bands whatsoever—but caused a different problem for handouts. The metafile slides did print, but as mirror images (that is, as if you looked at them from the back), and some of the images were also improperly rotated.

Were the bands caused by the OS/2 drivers, the printer, or both? And if the printer was involved, were they characteristic of the 1200C, or just a defect of my specific unit? IBM could not comment on the bands problem and suggested contacting—*you guessed*—HP.

I contacted HP technical support and was told what I already knew—that HP does not support OS/2—and I was referred back to IBM.

Comments

The DeskJet 1200C printer comes standard with 2MB of memory (4MB for PS) upgradable to a maximum of 26MB (20MB for PS). The more memory you can afford, the better.

Users of the 1200C recommend a minimum of 6MB, and 8MB for all but the most complex 24-bit full-page color jobs, which could easily take 16MB or more ("Welcome to the world of high-end graphics!" they say). Fortunately, my evaluation unit came with 12MB of memory.

The printer works with four ink cartridges which are about $40 a pop; you don't have to replace all of them at once. HP sells special paper and transparencies for the DeskJet family, but although high-quality paper improves the output, I got good printouts even with regular paper.

Even though the 1200C is not in the domain of photographic quality, it provides good color printing at a much more affordable cost. DOS and Windows users who have compared its output with the less expensive HP color DeskJets or other less expensive printers (e.g. Cannon BJ-600C) found its print quality significantly better, and they are satisfied with it. And unlike some other color printers, the 1200C has been around for a while and, therefore, is a more mature product.

This suggests that whatever problems I experienced lie mostly with OS/2 and its drivers. But without cooperation between HP and IBM it is not clear if and when the situation will improve.

Depending on which applications you are using, and what you will print, you may still be able to get good-quality, fast printing under OS/2. If your printouts are primarily drawings or Adobe Type 1 fonts, you may want to consider the PS option.■

Copyright © 1994 by Fabian Pascal. All rights reserved.

RESOURCES:

DeskJet 1200C/PS
Hewlett-Packard Co.
San Diego Printer Division
16399 W. Bernardo Dr.
San Diego, CA 92127-1899

Freelance Graphics for OS/2
Lotus Development Corp.
55 Cambridge Pkwy.
Cambridge, MA 02142

PMJPEG
Ken Yee
Internet: kenyee@ksr.com

PrntScrn
Mitnor Software
28411 E. 55th St.
Broken Arrow, OK 74014-1765
(918)357-1628

BAR CODE IS OUR SPECIALTY

INPUT AUTOMATION, INC.

The single source for all your bar code system needs: hardware, software, consulting and system design. Our philosophy is based on two principles: high-quality industrial products, and the best technical support available.

DESIGN AND CONSULTING

To create your optimal solution, an Input Automation consultant will design a complete system, and then recommend equipment that fills your exact needs.

INPUT automation, inc.
Authorized Value-Added Distributor

We will not be satisfied until our bar code system meets your demanding standards.

Call today for free info.& product information

(Dealer inquiries welcome)

Call for an appointment to see our Showroom

Southern California
Tel: (310) 539-3598
Fax: (310) 530-2849
Tel: (714) 374-4511

Northern California
Tel: (510) 685-6563
Fax: (510) 685-2513

Bar Code Label Printers, Software, and Supplies

Laser Scanners. Omnidirectional, hand-held/hands-free, fixed mount.

Portable Data Collection Terminals

Welch Allyn bar code readers/scanners. Over 15 years leadership in bar code manufacturing.

Visa & M/C Accepted

© 1992 Copyright Input Automation, Inc. All rights reserved. All product names mentioned are trademarks of their respective manufacturers. Input Automation, Inc. recognizes these trademarks

Best Prices! Best Quality! Best Service!

CALL FOR UPDATED PRICES

LAITRON COMPUTER WEEKLY SPECIALS

Multimedia 486SX-25/128K

- 3 VLB PENTIUM READY MB
- Intel 80486SX-25CPU
- 2-Speed CD-ROM
- 16 bit SOUND CARD
- Deluxe Speaker
- 4MB RAM 70ns
- 1.44 Floppy Drive
- IDE/IO 2FD/2HD/2S/1P/1G
- 210MB IDE HD
- Mitsumi 101-key Keyboard
- 32 Bit VLB SVGA Card w/1MB
- 1024x768 .28dp SVGA Monitor
- Mini Tower Case
- 230-Watt Power Supply

$999

NOTEBOOK 486SX-25

- Intel 486SX-25 CPU/FAN
- 4MB RAM 70ns
- Built-in 1.44 Floppy Drive
- 172 MB Hard Drive
- Built-in Track Ball
- AT BUS IO For Docking Station
- One Serial One Parallel Part
- Enhanced Keyboard
- 32 Bit VLB SVGA Card 512K
- 1024x768 SVGA Display
- Pcmcia II and Pcmcia III
- Call for more optional

$1284

386DX-40128K

- AMD 80386DX-40 CPU
- AMI BIOS & MATH-Co Socket
- Internal Clock Battery
- 4 MB RAM 70ns
- 1.44 MB Floppy Drive
- IDE 2FD/2HD Controller
- AT I/O 2S/1P/1G
- 210MB IDE HD
- Mitsumi 101-key Keyboard
- Trident SVGA with 512K
- 14"SVGA Monitor .28dp 1024x768
- Mini Tower Case
- 230-Watt Power Supply

$719

IBM SLC2-66/64K

- IBM 486SLC W/Math-Co
- 2 VESA Local Bus Board
- AMI BIOS Internal Clock Battery
- 4 MB RAM 70ns
- 210MB HD
- 1.44MB Floppy Drive
- IDE 2FD/2HD Controller
- AT I/O 2S/1P/1G
- VLB VIDEO with 1MB
- SVGA .28dp SVGA Monitor
- Enhanced 101K Keyboard
- Mini Tower Case

$859

KEYBOARDS

Enhanced Keyboard	$16
Focus 2001	$31
Focus 7000 w/trackball	$42
Foucs 9001	$48
Keytronic101-Key	$24
Maxiswitch 101-Key 2189	$26
Maxiswitch 124	$65
Metek K208 101-Key	$22
MetekK104101-Key Click	$42
Mitsumi 101Key Model U	$15
Northgate Omni 101/102	$65
Northgate Omni Ultra	$83

CONTROLLER CARDS

IDE2FD/2HD/2S/1P/1G	$11
PCI IDE 2HD Controller	$30
PCI SCSI Controller	$79
Promise DC-2300 IDE Cache w/4HD/2FD	$65
Promise DC-4030 VLB IDE Cache w/4HD	$110
Promise IDE/IO VLB	$25
Adaptec 1522/1522K SCSI	$78/$135
Adaptec 1542CF/1542CFK SCSI	$156/$227
Adaptec 1742 EISA SCSI	$190
Adaptec 2742TK/2742A EISA SCSI	$334/$215
Adaptec 2742 EISA Kit for 14 HD	$267
Adaptec 2842 VESA SCSI Controller	$233
Adaptec 2940 PCI SCSI Controller w/Kit	$188
BusLogic BT445S VLB SCSI-II W/Kit	$195
BusLogic BT545KT BusMaster SCSI	$199
BusLogic BTB742KT EISA SCSI-II Kit	$299
BusLogic BTB747AK EISA SCSI	$349
DTC 3290 HD EISA SCSI	$390
DTC 2290 EISA IDE	$113
DTC 2280 ISA IDE	$14
DTC 2278 VLB IDE	$23
Trantor T130 8bit 7HD W/SCSI Works	$44
Ultrastor 24F EISA SCSI	$325
Ultrastor 34F VLB SCSI	$240

MOTHERBOARDS W/CPU

AIR 486DX4-100-256k 3PCI & 2VLB Slots	$720
AIR 486-33/DX2-66 256K 3VLB(ZIF)Intel CPU	$320/$359
AIR 486-33/DX2-66 256 8EISA, 3VLB(ZIF)	$510/$540
Asus 586-66/256K EISA/PCI	$895
Asus PCI 486DX4-100 256K 2VLB	$700
Asus 486DX2-66/256K w/2VLB(ZIF)	$380
Asus PCI 486DX2-66/256K w/SCSI & IDE (INT)	$500
IBM BLUE LIGHTNING 75 w/Math	$320
IBM SLC2-66/64K w/2VLB w/Math	$219
Nice 486DX2-66/50 256K EISA/VLB(ZIF)(INT)	$530
MicroStar 486DX2-66/256K w/2VLB(ZIF) (INT)	$365
MicroStar 486DX-33/128K w/2VLB(ZIF)(INT)	$310
INTEL Pentium 90/256k 4PCI FRASH BIOS IDE/IO	***$1095***
MYLEX 486DX2-66/256K2VLB(INT)	***$420***
Pentium 60 VLB 256K 4PCI&2VLB FRASH BOIS	***$799***
Pentium 66VLB 256K 4PCI&2VLB FRASH BIOS	***$915***
Pentium 90 PCI VLB256K FRASH BIOS	***$1095***
Pentium 60/66 W256k 4PCI	***$730/$890***
486DX-33/128K w/3VLB(AMD)	$235
486DX2-66/256K w/3VLB(AMD)	$305
486DX-33/40128K w/3VLB(AMD)	$260/$275
486SX-25-128K w/3VLB ZIF	$160
386DX-40/128K	$84

POWER SUPPLY & CASE

200/230W Power Supply	$35/$40
250W Power Supply	$55
300W Power Supply	$65
DesktopAT Case w/200W Power Supply	$54
Mini-TowerCase w/200W Power Supply	$51
MediumTower Case w/250W PS	$82
Full-Size Tower case w/250W PS	$109
SuperTowerCase w300WPS	$165
UPS /400/600/800/1200VA	$210/$245/$270/$310

NETWORK

3COM 3C503 Etherlink II 16 bit coax/TP	$129
3COM 3C509 Etherlink III coax/TP	$105
3C0M 3C509 COMBO	$110
INTEL EtherExpress 16 coax/TP	$99
INTEL EtherExpress 32 EISA	$205
SMC Ultra lineElite 16 coax/TP	$99
SMC Elite 16 combo	$110
SMC Elite 32 bit coax/TP	$210
16 Bit ethernet cards coax/TP	$34
16 Bit ethernet cards (3-in 1 combo)	$45
16 Bit ethernetcards(PCMCIA)	$195
16 Bit busmaster (NE2100 Compatible)	$79
Ansel P-NS2000-BA 10 BASE -2 & AUI	$98
Ansel P-NS2000--TA 10 BASE-T&AUI	$88
Ansel P-NS2000-3 10 BASE-T &2&AUI	$118
Arcnet 8-port Active Hub	$118
Arcnet Bus Topology 16 Bit ISA Card	$48
Arcnet Star Topology 8 Bit ISA Card	$43
Arcnet Star Topology 16 Bit ISA card	$48
Hub and Repeaters 8 port 10 base T Hub	$175
Hub and Repeaters 12-port 10 base THub	$345
Daughter Card BNC+AUI PORTS	$58
2 BNC Ethernet Repeater	$198
NOVELL NETWARE 3.12 10 USER	$1290
NOVELL NETWARE 3.12 15 USER	$615
NOVELL Personal NetWare 2 set package	$135

MULTIMEDIA

CreativeLabs MIDI Kit	$42
CreativeLabs SoundBlaster Pro VALUE	$80
CreativeLabs SoundBlaster 16 VALUE	$99
CreativeLabs SoundBlaster16 SCSI-2 W/ASP	$149/$198
CreativeLabs SoundBlaster16 MulitCD W/ASP	$139/$169
Creative Labs VideoBlaster	$260
Creative Labs WaveBlaster	$175
CreativeLab Video Spigot Windows	$199
CreativeLabs Discovery CD16 Upgrade Kit	$370
MediaVision Pro 16	$79
MediaVision Pro Audio Spectrum 16	$94
MediaVision Pro Audio Studio 16	$119
MedisVision Pro Audio Spectrum 16 External Kit	$45
MediaVision Pro Movie Spectrum	$229
MediaVision Pro MovieStudio	$290
Sigma Designs Reel Magic Lite	***$269***
SigmaDesigns Reelmagic Upgrade kit	***$595***
NEC Multimedia Upgrade Kit	**$290**
LAITRON Multimedia Upgrade Kit	**$249**
224Watt Deluxe Speakers	$175
120Watt Deluxe Speakers	$75
80Watt Deluxe Speakers	$55
40Watt Deluxe Speakers	$35
10Watt Deluxe Speakers	$18
Zoltrix Deluxe Speakers	$7

MODEMS

DataSystem Pocket Size14400 Fax/Modem	$179
Digicom 14400 Fax/Modem Sofeware Upgarable	$85
14400 Fax/Modem w/16550 internal	***$64***
Zoltrix 28800 Internal Fax/Modem	**$145**
Zoltrix 9600/2400 Internal Fax/Modem	$39
Zoltrix 9600/2400 Int. Fax/Modem (Windows)	$42
Zoltrix 14400 Internal Fax/Modem	$79
Zoltrix 14400 External Fax/Modem	$124
US Robotics 14400/14400 Int. Fax/Modem	$109
US Robotics 14400/14400 Ext. Fax/Modem	$134
WANG 9600/2400 EXT .FAX/MODEM	$44
INTEL 400 INT 144/144 V.42 ,V.32 bis,MNP5	$280
INTEL 14400/14400 FAX/Modem Int	$119
PCMCIA 9600 Fax/Modem (NOTEBOOK)	$150
PCMCIA 14400 Fax/Modem (NOTEBOOK)	$189

TAPE BACKUP

3M DC2120 Tape	$13
Colorado AB-11 External Tape Port	$38
Colorado DJ-10 120MB Tape Backup	$99
Colorado DJ-20 250MB Tape Backup	$152
Colorado FC-10 Tape Backup Controller	$85
Colorado TC-15 Controller w/Compression	$185
Colorado PT-252GB Int. Tape Backup	$920
Colorado PT-25E 2GB Ext. Tape Backup	$995
Colorado PT-50 4GB Int. Tape Backup	$1135
Colorado PT-50E 4GB Ext. Tape Backup	$1245
Colorado Trakker120MB Ext. Tape Backup	$230
Colorado Trakker250MB Ext. Tape Backup	$320
Conner 250 MB Internal w/Tape	$145
Iomega 250MB Insider Int. Tape Backup	$175
Summit SE250 250MB Int. Tape Backup	$140

MEMORY & CHIPS

1MBx3 SIMM 60ns	$37
1MBx3 SIMM 70ns	$35
4MBx3 SIMM 60ns	$136
4MBx3 SIMM 70ns	$129
1MBx36 SIMM 70ns	$150
2MBx36 SIMM 70ns/60ns	$305/$320
4MBx36 SIMM 70ns/60ns	$580/$590
Cyrix387DX-40	$48
Cyrix387DX-33/25	$45
Cyrix 387SX-25/20/16	$40
Intel Pentium 100/90/66/60	$Call/$725/$599/469
Intel 486 DX4 100/75	$585/$499
Intel 486 DX2 66/DX33	$275/$225
AMD 486 DX2 66/DX40/33	$230/$168/$158

CPUs & Memory....Please Call for New Daily Updated Prices

SOFTWARE

Lotus 1-2-3 for Windows	$290
Microsoft DOS 6.2 1(w/System Purchase)	$45
Microsoft Excel 5.0 for Windows	$285
Microsoft Office 4.2 for Windows	$460
Microsoft Office 4.2 Upgrade	$285
Microsoft Project 3.0 for Windows	$425
Microsoft Word for Windows	$290
Microsoft Windows 3.11 (w/System Purchase)	$45
Microsoft Windows 3.11 w/worksgroup(w/System)	$70
PFS Works for Windows	$29
WordPerfect 6.0(WIN)	$249

LAITRON COMPUTER

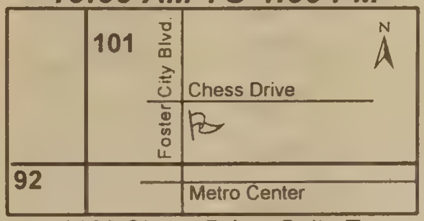
OPEN HOURS:

9:00 AM TO 6:00 PM M-F

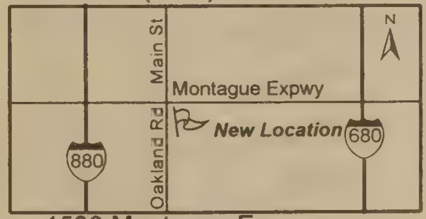
10:00 AM TO 4:00 PM S

SUNDAY AT SAN JOSE

10:00 AM TO 4:00 PM



1169 Chess Drive, Suite E
Foster City, CA 94404
Tel: (415)578-8998
Fax: (415)578-8880



1538 Montague Expressway
San Jose, CA 95131
Tel: (408)321-9488
Fax: (408)321-8349

Terms & Conditions:

- One year parts two years labor waranty
- Prices and availability subject to change without notice
- Shipping, COD, & insurance are extra and not refundable
- Prices reflect cash discount
- All returns must have prior authorization
- All returns must be in original packaging complete with manual, software,...etc.
- 15% restocking charge
- Not responsible for typos on this ad

Best Prices! Best Quality! Best Service!

CALL FOR UPDATED PRICES

LAITRON COMPUTER WEEKLY SPECIALS

troubleshooting & upgrading

Is your old dependable PC workhorse a bit too slow for you to soar through today's sophisticated software? Did you just received a multimedia upgrade kit for birthday but just not quite sure on how to install it? Or are you plagued with strange problems but don't know how to find the faulty component that needs to be replaced? Well, no more headache: Laitron now offers troubleshooting and upgrading services. We have experienced technicians on staff 7 days a week to help you determine what needs to be done and make sure the job is done right. And unlike other stores, we won't charge you an arm and a leg to get your PC working right. Our prices are most compatible with your wallet:

Labor Charge for :
CPU & Memory Upgrade...FREE
System Diagnostic Checkup..$10
Multimedia Kit Installation..$30
Installation for HDD...............$15
Video Card + Driver Setup....$20
Motherboard Upgrade............$20
Install Software/Setup......$30/hr
System Troubleshooting...$40/hr

So whether you are trying to turbocharge you PC or simply getting it rolling again, come to us and we'll get you flying in no time.

LAITRON COMPUTER *San Jose, Foster City*
Coming Soon To Walnut Creek

TURN PAGE FOR OUR → OTHER ADS

Best Prices! Best Quality! Best Service!

CALL FOR UPDATED PRICES

LAITRON COMPUTER WEEKLY SPECIALS

PENTIUM 90

- Intel Pentium 90 CPU w/fan
- 4 PCI Slots & 2 VLB Slots
- Auto Power Saving
- AMI Flash BIOS 256K Cache
- 8MB 72 Pin RAM 70ns
- Made in USA
- Teac 1.44 MB Floppy Drive
- Adaptec 2940 PCI SCSI-2 Card
- 540MB SCSI HD
- Focus 2001 101-key Keyboard
- Orchid Kelvin 64 PCI w/1MB
- 15" Non-Int.1280X1024 Monitor
- Medium Tower Case
- 250-Watt Power Supply

$2399

PENTIUM PCI

- Intel Pentium 60 CPU w/fan
- MICRO STAR
- 4 PCI Slots
- Auto Power Saving
- 256K Cache
- PCI IDE Controller Card
- 8MB RAM 70ns
- Teac 1.44 MB Floppy Drive
- Conner 420MB IDE HD
- 2S1P1G IO
- Focus 2001 101-key Keyboard
- Diamond Stealth32 PCI w/1MB
- 15" Non-Int.1280X1024 Monitor
- Medium Tower Case
- 250-Watt Power Supply

$1799

486-66 VLB

- AIR 3 VLB W/Power Saving
- Pentium Ready
- INTEL80486DX2-66 CPU w/fan
- AMI BIOS 256K Cache
- 4MB RAM 70ns
- Teac 1.44 MB Floppy Drive
- VLB IDE/IO
- Conner 420MB IDE HD
- Mitsumi 101-key Keyboard
- S3 805 VLB VIDEO w/1MB
- 15" Non-Int. 1280X1024 Monitor
- Mini Tower Case
- 230-Watt Power Supply

$1129

486DX-40/128K

- VLB Main Board W/ZIF
- Pentium Over Drive Ready
- AMD 80486DX-40 CPU
- AMI BIOS
- 4MB RAM 70ns
- Teac 1.44MB Floppy Drive
- VLB IDE/IO
- CONNER 210MB IDE HD
- Enhanced 101-key Keyboard
- VLB VIDEO with 1MB
- 1024x768 .28dp SVGA Monitor
- Mini Tower Case
- 230-Watt Power Supply

$889

CD-ROM SOFTWARE

American Business Phone Book '93	$15
Animals v.1.0 (DOS)	$12
Arthur's Teacher Trouble (MPC)	$19
Barney Goes To Space	$21
Battle Chess (Enhanced)	$20
Bus & Econ Atlas (DOS)	$22
Camen San Diego (DOS)	$19
CD Game Pack II (DOS)	$16
CD Storytime (DOS)	$15
ChessMaster 3000 (MPC)	$15
Compton's Encyclopedia (MPC) 1994	$49
Compton's Family Encyclopedia	$34
Compton's Interactive Encyclopedia	$29
Desert Storm (MPC/Mac)	$16
Dictionary of the Living World	$21
Dinosaur & Spac Adventure	$18
Dr. Window Shareware	$15
Dr. Music Shareware	$14
Dr.Game Shareware	$14
Electronic Home Library	$17
Family Choice/Britannica	$15
Family Doctor(DOS/Mac)	$16
Family Education Collections (DOS)	$16
Font Master I or Font Master II	$22
Ftura Games	$21
Great Cities of the World vol.1/2(DOS)	$17
Guiness Disk of Records (MPC) '93	$18
Illustrated Works of Shakespeare	$27
Jones in the Fast Lane (MPC)	$14
King's Quest V (DOS)	$11
Koda Photo CD	$12
Library of the Future 1st ed.	$30
Loom from Lucas Film (DOS)	$16
Macmillan Dictionary for Children (MPC)	$19
Magazine Rack	$35
Manhole	$24
Mario's Missing/World Atlas	$16
MavisTeachesTyping (MPC)	$16
MayoClinic (MPC)	$17
Media Clips 1 Pak (MPC/Mac)	$35
Microsoft Bookshelf '94 (MPC)	$35
Microsoft Works (MPC)	$45
MIDI Music Shop	$16
Mirror Mirror	$22
Mixed-Up Mother Goose (MPC)	$16
Monkey Island(DOS)	$16
Musical Instruments	$69
National Geographics Mammals (DOS)	$20
National Parks	$20
Ocean Digital Imagery v.1 (DOS)	$19
Oldies But Goodies	$20
PC-SIG 12th ed. (DOS)	$23
Peter and the Wolf (MPC)	$13
Playing with Language - (E/F/G/J/S)	$22
Publish It! v. 2.0 (DOS)	$19
Roger Ebert's Movie Companion	$35
Secret Weapons of Luftwaffe (DOS)	$16
Seventh Guest-Virgin Games	$35
Sleeping Beauty	$15
So Much Shareware! II	$13
So Much Shareware! III	$18
Sound Library(MPC)	$13

CD-ROM SOFTWARE

Space Series Apollo	$40
Stellar 7 (DOS)	$14
Swim Wear 1993	$26
The Beauty & The Beast (MPC)	$13
The Best of Micro Prose	$25
TIME Almanac 1991 (DOS)	$16
TIME Table of History (DOS)	$16
Toolworks Encyclopedia (MPC)	$43
Total Baseball (DOS/Mac)	$16
True Type Explosion Fonts	$25
U.S. Atlas & Automap (DOS)	$23
U.S. History (DOS/Mac)	$20
USA Wars: Korea	$22
USA World Atlas Pack	$26
USA Wars: Vietnam (DOS/Mac)	$22
USAWars: World War II (DOS/Mac)	$22
Variety Store	$21
VGA Spectrum Sound Library	$18
Who Killed Sam Rupert	$25
Wing Commander/Ultima VI (DOS)	$16
Winware! vol. 3	$18
Wiz-Pak Shareware	$12
Woman of Venus	$28
World of Flight	$28
World Atlas v. 3.2 (MPC)	$11
World of Trains	$30
World View (DOS)	$11
World Vista	$28

CALL FOR ADULT TITLES & MORE

CD-ROM

NEC CD-ROM 4-SPEED	$890
NEC CD-ROM CDR-500 3xi	$395
NEC CR-ROM CDR-510 3-SPEED	$325
MITSUMI CD-ROM(250ms) Duble Speed w/Card	$135
PANASONIC CR-562(300kb/s)	***$135***
TEAC CD-50 DUAL SPEED	$199
TEXEL INT 3028	$225
TEXEL EXT 5021	$330
TOSHIBA 3401/4101 INT	$249/$199
TOSHIBA 3401EXT	$349
SONY CD 31A W/CONTROLER INT 2speed	$120
SONY CD 33A W/CONTROLER INT 2speed	$135

PRINTERS

Canon BJ-200E	$295
Canon BJC-600 Color	$575
Citizen GX200	$135
Citizen Project II (Portable)	$240
HP Portable 310	$289
HP DeskJet 520	$285
HP DeskJet 560C	$569
HP LaserJet 4	$1355
HP LaserJet 4 Plus	$1399
HP LaserJet 4L	$645
HP LaserJet 4M/ML	$1810/$1025
HP LaserJet 4P/4MP	$949/$1370
HP 1200 C	$1425
Oki Data OL400E	$485
Panasonic 2023	$185
Panasonic 2123	$218
Panasonic 2150	$140
Panasonic color kit	$54
Panasonic 4410 Laser Printer	$449

MONITORS

ADI 4G15" .28dp 1280x1024	$369
CTX 14" SVGA 1024x768 .28 Non-Interlaced	$229
CTX CMS 1562 15" 1024*768 .28 NI	$315
Hitachi CM-2095	$1215
Hitachi CM-2187 .28/.31 dp	$1950/$1800
IDEK 17" .26 DP	
Mag 17FG DX/MX 17" .26dp	$665/$795
Mag 15F LR DX/MX	$365/459
Mitsubishi HL6955SETK 20" .31dp	$1690
Mitsubishi Diamond Pro 17" .26dp	$1045
Nanao 340iw	$620
Nanao F550iw /F550i	$925/$785
Nanao T560i	$1395
Nanao F560iw	$1161
Nanao T660i	$2090
Nanao F750i	$1450
Nanao F760iw	$1876
NEC 3FGe	$538
NEC 3V	$453
NEC 4FGe	$603
NEC 5FGP	$1075
NEC 5FGe	$945
NEC 6FGP	$1969
Sony CPD-1604S	$699
Sony CPD-15SF	$438
Sony CPD-1730	$849
Sony 17SE 1	$903
Sony 20SE1	$1789
Viewsonic 4E	$245
Viewsonic 5+	$299
Viewsonic 14E(Green)	$295
Viewsonic 6E(Green)	$259
Viewsonic 17G(Green)	$765
Viewsonic 17E(Green)	$699
Viewsonic 15E/15EX	$349/$375
Viewsonic 15	$414
Viewsonic 17	$849
Viewsonic 20	$1405
Viewsonic 21	$1635
Monochrome 14"	$70
Monochrome SVGA14"	$87
Monochrome SVGA15"	**$80**
SVGA 14" 39dp	$165
SVGA 14" 28dp full screen	$197
SVGA 14" .28dp Non-Interlaced full screen	$220
15"SVGA 1280X1024 Non-Int	***$275***

MISC

3-Button Mouse	$7
Logitech First Mouse	$25
Logitech Mouseman	$32
Logitech Mouseman(Cordles 2)	$80
Logitech Trackan	$73
Microsoft Mouse	$28
MS Compatible Mouse	$10

SCANNERS

Artec ViewScan/32S B/W	$85
Artec ViewScan/256S True 256 grayscale	$115
Artec WalkScan /256S	$205
Logitech Scanman Easy Touch	$199
Logitech Scanman 256 gray scale	$169
Logitech Scanman Color	$429

HARD & FLOPPY DRIVES

Conner CFA210 212MB 12ms IDE	$159
Conner CFS420A 420MB 12ms IDE	$204
Conner CFA540A 540MB <12ms IDE	**$264**
Maxtor 7213AT 213MB 15ms IDE	$185
Maxtor 7245AT 245MB 15ms IDE	$205
Maxtor 7345A 340MB 13ms IDE	$215
Maxtor 7546 540 MB 11ms, IDE	***$264***
Quantum LPS270A 270 MB 12ms IDE	$205
Quantum LPS340A 340 MB 12ms IDE	$235
Quantum LPS540AT 540MB 12ms IDE	$295
Western Digital WD2200 200MB 14ms IDE	$170
Western Digital WD2250 250MB 14ms IDE	$198
Western Digital WD2340 340MB 13ms IDE	$210
Western Digital WD2420 420MB 12ms IDE	***$209***
Western Digital WD2540 540MB 12ms IDE	$310
Conner CP30350 340MB 12 ms SCSI	$265
Conner CP30540 540 MB 12 ms SCSI	$325
Conner CPF1060S 1.08 GB 9 ms SCSI 256K	**$625**
Fujitsu M2624F 520MB 11ms SCSI	$440
Fujitsu M2694SA 1.0 GB 10ms SCSI	$750
Fujitsu M2654SA 2.0 GB 12ms SCSI	$1375
Maxtor MXT-340S 340 MB SCSI	$280
Maxtor MXT-540S 540 MB 8.5ms SCSI	$380
Maxtor MXT1240S 1.2GB 8.5ms SCSI	$1190
Micropolis MC2210A 1.0 GB 10ms IDE	***$665***
Quantum LPS540S 540MB 12ms SCSI	$329
Quantum1.0GBPD 1080S 10ms 512K SCSI III	***$595***
Quantum 1.4 GB 1400S 8.9ms 512K SCSI	***$885***
Quantum 2.1 GB Empire 8.9ms 512K SCSI	***$1135***
Toshiba 1.2GB MK538 12ms 512K Cache SCSI-2	$650
Panasonic 1.2/1.44 Floppy Drive	$42/33
Teac 1.2/1.44 Floppy Drive	$45/$35
3 1/2" HDD 25Pieces Package	$9

VIDEO CARDS

ATI Graphics Ultra Pro1MB/2MB(ISA)VRAM	$175/$223
ATI Graphics Ultra Pro 2MB(VLB)VRAM	$235
ATI Graphics Ultra Pro 1MB/2MB(EISA)	$240$290
ATI Graphics Ultra Plus 1MB/2MB	$165/$205
ATI Graphics Ultra Pro 2MB(PCI)	$224
ATI WINTURBO 64 2MB/4MB VLB/PCI	$315/$475
Cirrus Logic CL-GD5420 w/1MB	$58
Cirrus Logic CL-GD5424 /5426 VLB w/1MB	$60/$65
Diamond Speed Star Pro (ISA/VLB) 1MB	$95
Diamond speed Star [illegible] 1MB	$85
Diamond Stealth 1MB VRAM ISA	$110
Diamond Stealth 24 VLB w/1MB	$122
Diamond Stealth PCI 32 1MB/2MB	$153/$207
Diamond Stealth PCI 64 2MB/4MB	$305/$459
Diamond Stealth Pro VRAM 1MB/2MB VLB	$205/$275
Diamond Viper VLB , PCI w/2MB	$269
Matrox ULT2VH Ultima 2MB VRAM VLB	$464
Matrox Impression 3MB VRAM VLB	$675
Matrox PCI 2MB/2MB PLUS VRAM	$420/$445
Number 9Xe 64 PCI/VLB 1MB/2MB	$175/$245
Number 9 lever 11/12(ISA/VLB)	$344/$409
Orchid Fahrenheit ISA/VLB 1MB	$119/133
Orchid Celsius VLB 1MB/2MB	$127/$175
Orchid Kelvin 64 Bit VLB,PCI 1MB/2MB	$128/$178
S3 805 PCI/VLB 1MB	$75
Trident 9200/9400 1MB VLB	$65/$68
Trident 9000A 256K/512K	$31/$38
Trident 8900CL w/1MB	$58
Tseng lab W32 VLB 2MB (45 ns memory)	$145

Tracking Your Work Force

continued from page 90

unique employee field is alphabetic rather than numeric. I would prefer to have a choice. Since I use a numeric system I had to improvise a coding structure to get the sorts I wanted.

The Benefits screen can also be customized to contain as many benefits as your company might offer. Each benefit is maintained as a coded field that can be linked to a formula and automatically applied as each employee becomes eligible; for example, your insurance program might automatically start on the first of the month following the month in which the employee completes thirty days of employment. All the necessary information is easily calculated and available for reporting and paying the bills. This approach can save you hours of reconciliation when it comes to benefit billing time. This information can also be manually inserted.

A separate screen is available for working with your company's 401k plan. You can enter the employee deduction as a whole number or a percentage as well as adding any employer contributions.

Information about dependents is handled well—if in somewhat more detail than you might otherwise keep. Names, relationships, ages, social security numbers, and benefit plan eligibility are kept for each dependent. However, Abra 2000 does have its peculiarities. When an employee decides to add medical coverage for their dependents, I would usually open the benefit screen for that employee and change their plan coverage to "employee plus dependent coverage." But Abra 2000 requires that you also modify the dependent record to make them eligible for that particular benefit before the change is reflected in the cost report. This means you must change two screens rather than a single screen.

The Skills screen keeps the information, linked to a coded table, about what an employee is trained to do. Each skill you are tracking must be added to the table.

An Events screen works the same way. You must first code an event before using it to track which employees have completed the event.

I particularly like the Wellness screen. Here information is kept about blood type, drug testing results, blood donations, and allergic reactions among others.

The Urgency, or what I call the emergency contact, screen includes space for both home and work contact numbers. We had, for example, a new ski patroller run into a tree branch and get knocked unconscious. I was able to quickly look up the emergency contact to notify our doctor that the injured ski patroller was being driven to the hospital as well as notify her family of a possible problem. Luckily it was just a mild concussion and not a serious injury.

Lastly, an OSHA screen keeps track of work-related accidents and illnesses. The information from this section lets you complete the required OSHA forms for posting and reporting. This screen saves endless hours in report preparation.

Reporting

Abra 2000 has many built-in reports, which should provide most of the basic information you will need. Except for some of my more specialized reports, everything works smoothly.

Complete reporting about personal and benefit information is available. It will even automatically present you the COBRA let-

NEW
AltherNet

Networking Made Easy
ONLY $89.00!

AltherNet®
The Smart Green Alternative to Ethernet

Instant Networking without opening your computer!

- One AltherNet® unit networks two PCs
- True Networking under Windows for Workgroups
- Installs Without the Need of Tools
- Connects through the Parallel Port of Your PC or Notebook and Lets You Share a Printer
- Inexpensive Alternate to PCMCIA
- Includes three 10 ft. Parallel Cables, WFW 3.11 Driver, DOS and Windows 3.1 File Share Utilities

AltherNet
AltherLink
L.C.I.

AltherNet® unit shown with cables and software

ONLY $89.00!
We Accept
MasterCard VISA
Dealers Welcome
(minimum 14 unit order)

Order Today
1-800-660-3126
or
1-800-441-6562
(24Hr.) FAX/INFO 408-441-6856

L.C.I.
Just Smart Connectivity

California Residence Add 8.25% TAX

We Even include a Chance to Win a 7-Day Cruise!

GOLDEN MICRO COMPUTERS

BEST SERVICE IN TOWN

OPEN 7 DAYS

5 Years Labor Warranty
1 Year Parts Warranty
Extended Warranty Available!

EVERY SYSTEM INCLUDES:

4 MB RAM, 210MB IDE Hard Drive, SVGA Monitor (1024x768, .28dp) & 1MB SVGA Card, 2 Floppy Drives (1.2 & 1.44MB), IDE/IO Card, 2 serial, 1 parallel, and 1 game ports, 101 Enhanced Keyboard, Minitower or Desktop Case with Power Supply.

UPGRADE 486DX2-66 CPU $79

$119 9 Pin Printer w/80, 136 Col. 192 cps

SYSTEM UPGRADES:

- Add $25 for 256K cache
- Add $50 for Green PC
- Add $120 for EISA Systems Including Interface Cards

VESA LOCAL BUS 486DX 128K DX2-66/DX-33 Complete Systems

- Pentium Ready
- 4MB RAM exp to 32MB
- 8K Internal Cache
- Shadow RAM

Landmark speed: 220/111

$1149/1095

486DX 128K DX2-66/DX-33 Complete Systems

intel inside

- Pentium Ready
- 4MB RAM exp to 32MB
- 8K Internal Cache
- Shadow RAM

Landmark speed: 220/111

$1069/1049

486SX 128K SX-33/SX-25 Complete Systems

intel inside

- 4MB RAM exp to 32MB
- 8K Internal Cache
- Shadow RAM

Landmark speed: 111/90

$919/879

386DX 128K 40/33 Complete Systems

- 4MB RAM exp to 32MB
- Shadow RAM

Landmark speed: 65/55

$815/805

386SX 40/33 Complete Systems

- 4MB RAM exp. to 16MB
- Shadow RAM

Landmark speed: 42/24

$779/769

CASE & POWER SUPPLY

Minitower w/200 Watt	$38
Desktop w/200 Watt	40
Mid Tower w/230 Watt	65
Full Tower w/250 Watt	78
200/230 Watt power supply	25/30
200 Watt Green PC Power Supply	48
Wild Power Card	3.50

VGA CARDS

VGA 800x600, 256K	$24
Trident 512K	34
Oak 1MB	55
Trident (8900CL) 1MB	55
Tseng ET 4000	69
Oak 1MB WIN ACC (ISA)	59
Fahrenheit 1280 Win Acc (VESA)	129
Diamond Stealth 24 (VESA)	129
Orchid Kelvin 64 (PCI/VLB)	139

ADD ON CARDS

Super I/O (16550) +IDE	$45
SCSI Controller (8 Bit)	38
RLL Controller	39
Adaptec 1542C	175
MGP	14
Super I/O (16550)	29
IDE/I/O (2S, 1P, 1G)	13
IDE/I/O (VLB)	20
IDE (PCI)	28
Ethernet (8 Bit/16 Bit)	45
10 Base-T (16 Bit)	45

FLOPPY DRIVES

Teac 1.2MB 5.25"	$36
Teac 1.44MB 3.5"	38
1.44 Floppy Diskette	30¢

MISCELLANEOUS

387SX33/25 Math Co	$30/30
387DX-40/33 Math Co	35/35
MS mouse (OEM)	25
Logitech Mouseman (OEM)	35
Mouse	8
9 Pin Printer Alton AP 2000	119

CD ROM & SOUND CARD

Sony/Mitsumi/Panasonic Double Speed CD-ROM Drives	$135
Sound Blaster 16	95
Sound Blaster 16 SCSI II	155
Media Magic 16 Bit (Supports Sony, Mitsumi, & Panasonic Drives)	75
Sound Pro Speakers 80W	65

KEYBOARDS

101 Enhanced/IBM P/S2	$15
Maxiswitch	25
Adaptor IBM AT	2.99
Keytronic 101	25

MODEM

2400 Baud Internal	$25
9600/2400 Fax/Modem	35
14,400 Fax/Modem Int.	75

MOTHERBOARDS & CPU

386SX-25/33/40	$50/60/70
386DX-16/25/33/40 (no cache, no CPU)	43
Add $15 for 128K	
Add $25 for 256K	
486DX-33/66 (no cache, no CPU)	40
386DX-40 128K	85
486SX-25/33 128K (Intel)	148/178
486DX-33 128K (Intel)/CYRIX	315/235
486DX2-66/128K (AMD)	299
486DX2-66 128K (Intel)	345
486SLC-33/40	74/85
486SLC2-66 (IBM)	235
486DX4-100 MB & CPU	700
Pentium 60/66 MB & CPU	770/870
Pentium 90 MB & CPU	1200

TAPE DRIVES

250 MB Colorado	$155
250 MB Archive	150
120 MB/250 MB Tape	18/18

MONITORS

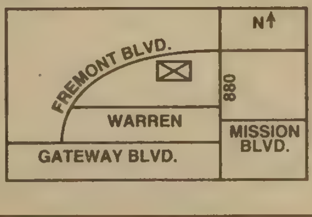
12"/14" Mono (refurbished)	$35/45
14" Mono (NEW)	65
14" Mono VGA	85
14" SVGA (.39)	175
14" SVGA (.28)	205
14" Non-Int SVGA	220
14" ViewSonic 6E	269
17" ViewSonic 17E	699
15" Arche/CTX (Low Radiation)	315

HARD DISK

40/80 MB	$109/129
170MB Conner/Maxtor	150
120 MB Conner/Maxtor	165
170/210 MB Conner/W.D.	169/179
245 MB Maxtor/Conner	189
340 MB Maxtor/Conner	199
420 MB	220
540 MB	275
1GB Conner/Quantum (IDE)	485

PC Repairs & Upgrades Welcome

46560 Fremont Blvd, Suite 408 • Fremont, CA 94538
(510) 623-0866 (800) 588-0866
FAX (510) 623-0321
Hours M-F 9-6 Sat/Sun 10-3



GOLDEN MICRO COMPUTERS

Ad reflects cash discount • Prices subject to change without notice. • Not responsible for typographical errors.

ters that must be sent to each terminating employee as well as prepare mailing labels if needed.

RESOURCES:

Abra 2000
Abra Cadabra Software, Inc.
888 Executive Center W., Ste. 300
St. Petersburg, FL 33702-2402
(813)579-1111

There are many compensation reports built in, most of which I find useful. Performance reviews are available by due date, a necessity for modern human resource management. There are new hire logs, and a variety of salary analysis options, which can be reported by job code, department organization, or even by title, depending on how you organized Abra 2000.

The EEO reporting section has the standard EEO reports as well as a special I-9 verification report. The OSHA section tracks by date, by employee, by location, and by type of accident, and does both the OSHA 100 and 200 report.

Other Features

Establishing records for multiple companies is easy with Abra 2000. For instance, I keep one "company" for my current employees and another "company" for those who terminated during the year. This keeps every employee's record available if I need it for past employment verifications, credit history requests, etc. Abra 2000 has a little anomaly here. When I transfer an employee from the active to the terminated company, all of the information is transferred including everything in all the subsidiary databases. But the employee is not eliminated from the main database until I formally do this. Transfer, in Abra 2000 language, means to make a complete copy.

Abra 2000 has a functional custom report writer built into the database. I had been warned that the report writer was very weak. With only a minor exception or two, this is simply not true. I am able to get every custom report I need from the Abra 2000 report writer.

Abra 2000 also has a Letter Writer. Here custom letters about COBRA or even custom benefit statements can be produced.

The documentation is reasonable. It gives examples of all the databases and shows you the dBASE format for each of the many files it uses. The documentation is sprinkled with screen shots, and is easy to follow and understand.

However, everything in Abra 2000 is so obvious that you might never have to use the documentation. Other than checking how to write a complicated benefit formula for my benefit codes and to see how to write a formula in the report writer, I have not used it for anything else.

Abra 2000 is part of an extensive software system from Abra Cadabra. You can acquire attendance, org charting, applicant tracking, resume scanning, payroll, training, position control, and others.

Technical nN

Abra 2000 is Clipper based, so the file structure is standard dBASE. I've used dBASE, Superbase, Access, and Paradox for Windows to work on Abra 2000 files with absolutely no problems.

Lastly, since Abra 2000 is a DOS-based program, my computer is 100% Windows except for Abra 2000.■

Copyright © 1994 by Woody Liswood. All rights reserved.

Hassle-Free® Printer Sharing

Connect Your PCs To Any Printer

HASSLE-FREE PRINTER SHARING
STARTER KIT
SNAP

Printer sharing doesn't get any easier. Or any more economical. ASP's SNAP system can have your PCs sharing a printer in minutes!

The **SNAP Starter Kit** gives you everything you need to get your printer-sharing system started—all in one box. Here's what you do:

1. Attach a SNAP Transmitter to the parallel port of each PC,
2. Attach a SNAP Receiver to your printer's parallel port, and...
3. Connect them all with the supplied telephone-type cables. **Now you're ready to print.**

No software or complicated installation required! And you can add more users as your office grows. Expand it to as many as 20 PCs.

Hassle-Free®—or your money back!

To order or for more information, call:

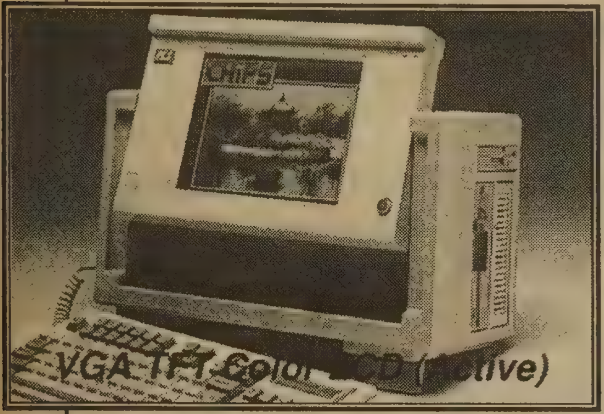
1-800-445-6190
Dept. DHCQJ

ASP®
ASP COMPUTER PRODUCTS, INC.

160 San Gabriel Drive • Sunnyvale, CA 94086 • Phone: (408) 746-2965 Fax: (408) 746-2803

SONGTECH INTERNATIONAL, INC.

POWERFUL PORTABLES!

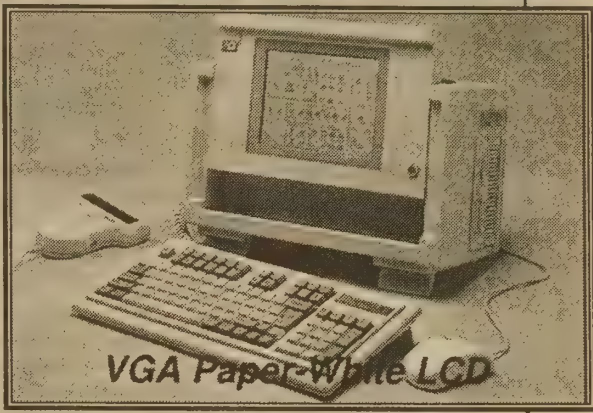


CREATE YOUR OWN PORTABLE PC

Use The PCIII Portable "SKD" Computer Case to create a Power Portable that meets any requirements you may have. Build a Portable Multimedia PC. The Toshiba TFT screen provides the speed & color quality you need. There is ample room for an internal CD-ROM.

Build a Portable File Server. The 6 Expansion Slots in combination with capabilities of having up to 4 internal Storage Devices, makes our Portable the ultimate base for the Network Installer.

Technical Scientific Departments love our Portable which uses Full Length Expansion Boards & are frequently used as a Portable Measuring Instrument.



- **512 COLORS (TFT)**
- **9" or 10" VGA SCREEN 640X480**
- **SIMULTANEOUS EXTERNAL CRT DISPLAY**
- **DETACHABLE 102/103 KEYBOARD.**
- **ANY PERFORMANCE VGA CARD**
- **4 DRIVE BAYS FOR STORAGE DEVICES**
- **ACCEPTS ANY BABY SIZE MOTHERBOARD**
- **6 EXPANSION SLOTS**

CALL FOR PRICING

BASIC COMPUTER SYSTEMS

•PENTIUM PCI	$CALL
•486DX2-66/256K	$1,100
•486DLC-33/128K	$795
•IBM486SLC-2/66	$910
•486DX4-100	$CALL
•486DX33/128K	$995
•386DX-40/128K	$720
•386SX/33	$695

BASIC SYSTEM INCLUDES:

- MOTHERBOARD W/4MB RAM
- 1.2 & 1.44 FLOPPY DRIVE
- SVGA MONITOR .28 mm
- HARD DRIVE (OPTION)
- 1 MB SVGA CARD
- MINI-TOWER CASE W/200W PS
- ENHANCED 101 KEYBOARD
- MOUSE
- IDE I/O CONTROLLER (2S/P/G)
- VESA LOCAL BUS (OPTION)

CPU/SIMMS/MATH-CO

256KX9-80NS SIMM	$10
4MBX9-70NS SIMM	135
1MBX3-70NS SIMM	37
1MBX9-70NS SIMM	40
44256-08 DRAM	6
1MBX36-70NS 72 PIN	145
4MBX36-70NS 72 PIN	640
2MBX36-70NS 72 PIN	300
INTEL 486DX2-66 CPU	275
INTEL 486DX-33 CPU	215
INTEL 486DX4-100 CPU	595
486 COOLING FAN	10
80387SX-33 MATH-CO	35
80376DX-40 MATH-CO	35
486DLC-33/40 CPU	65/75

MOTHERBOARDS

386SX/33 MHZ/CPU	$69
386DX40 MHZ/128K/CPU	100
486SX/33 MHZ/256K/CPU	195
486DX/33 MHZ/256K/CPU VLB	325
486DLC/40 MHZ/256K/CPU VLB	195
486DX2/66 MHZ/CPU/VLB	420
IBM486SLC2/50/CPU/MATH-CO	180
IBM486SLC2/66/MATH-CO/VLB	215
PENTIUM 586 PCI 60/66 MHZ/256K	1100/1250
PENTIUM PCI 90 MHZ/256K	1350
486DX4-100 MHZ/256K/VLB	795

ADD-ON/DISPLAY CARDS

NETWORK ETHERNET 16 BIT NE200B COAX/10BASET	$48
MONO GRAPHICS PRINTER CARD (MGP)	15
SVGA CARD (512K)	40
SVGA CARD 1MB	55
HI-COLOR 1MB SVGA CARD	65
VESA LOCAL BUS IDE I/O	25
VESA LOCAL BUS SVGA 1MB	89
DIAMOND STEALTH 24 SVGA 1MB	160
DIAMOND STEALTH PRO 1MB VLB/2MB	270/330
DIAMOND SPEEDSTAR PRO 1MB	105
DIAMOND VIPER 2MB VLB	350
ATI MACH 64 PCI/VLB/ISA 2/4MB	230/495
ATI MACH 32 PCI/VLB/ISA 1/2MB	125/175
ORCHID KELVIN 64 PCI/VLB 1/2MB	145/185
AT I/O (2S/1P/1G) CARD	12
HIGH SPEED AT I/O 2S/1P/1G (16552)	39
PRINTER CARD	8
VESA LOCAL BUS IDE I/O 2FD/4HD	45
VESA LOCAL BUS IDE/HI SPEED I/O 4FD/4HD	59

HARD/FLOPPY DRIVES/CONTROLLERS

TEAC 1.2MB FLOPPY DRIVE	$45
TEAC 1.44MB FLOPPY DRIVE	35
TEAC 1.44/1.2MB COMBO DRIVE	95
170 MB IDE HARD DRIVE	185
210 MB IDE HARD DRIVE	195
250 MB IDE HARD DRIVE	205
340 MB IDE HARD DRIVE	225
420 MB IDE HARD DRIVE	229
540 MB IDE HARD DRIVE	285
SYQUEST SQ-800 88MB CARTRIDGE	80
SYQUEST SQ-400 44MB CARTRIDGE	50
SYQUEST SQ-5110C 105MB SCSI DRIVE	315
SYQUEST SQ-555 44MB SCSI DRIVE	265
SYQUEST SQ-3105 105MB SCSI/IDE DRIVE	345/325
340 MB SCSI HARD DRIVE	295
540 MB SCSI HARD DRIVE	395
1GB SCSI HARD DRIVE	695
16-BIT SCSI HOST ADAPTER	50
SCSI EXT. BOX WITH POWER SUPPLY	75
COLORADO DJ20 250MB TAPE BACK-UP	160
CALIFORNIA 250MB TAPE BACK-UP	150
DC2120 120MB TAPE CARTRIDGE	18
FC-20 FOR BACK-UP SYSTEM	85
IDE HDD/FDD CONTROLLER	12
IDE CONTROLLER W/I/O (2S/P/G)	15
ADAPTER 1542CF/CFK SCSI CONTROLLER CARD	185/245

CASES

DESKTOP W/PS	$55
MEDIUM TOWER W/PS	65
MINI-TOWER W/PS	45
FULL TOWER W/PS	75

KEYBOARDS/POWER SUPPLY

101 KEY CLICK	$20
KEYTRONICS 101 KEY	25
FOCUS KEY FK-2001	35
FOCUS PRO FK-8000	39
FOCUS PRO FK-9000	50
230W AT POWER SUPPLY	35
250W AT POWER SUPPLY	45

MONITORS

14" MONOCHROME TTL	$85
14" IMPRESSION SVGA (1024X768) .39	205
14" IMPRESSION SVGA (1024X768) .28	235
15" INFINITI SVGA (1024X768)	295
VIEWSONIC SVGA (14", 15", 17", 21")	CALL
17" INFINITI SVGA (1024X768)	750
14" IMPRESSION NI SVGA (1024X768) .28	250

FAX & MODEMS

FAX/MODEM 96/24 (SEND/RECEIVE)	$40
FAX/MODEM 14400/14400 (EXT)	135
FAX/MODEM 14400/14400 (INT)	75

LCD, GAS PLASMA PORTABLE & CRT

LCD COLOR PORTABLE KIT ACTIVE MATRIX (TFT)	$3,200
LCD COLOR PORTABLE KIT PASSIVE DUAL SCAN (STN)	1800
LCD COLOR PORTABLE KIT PASSIVE DUAL SCAN PLUS	2200
CRT COLOR VGA PORTABLE KIT	1250
GAS PLASMA VGA+2 150:1 PORTABLE KIT	845
PORTABLE LCD VGA DISPLAY CARD	150
PORTABLE CARRYING BAG	35
PORTABLE POWER SUPPLY	95
PORTABLE KEYBOARD	80

MICE/SOFTWARE

IMPRESSION MOUSE	$12
MICROSOFT MOUSE (SERIAL)	25
LOGITECH MOUSEMAN (SERIAL)	38
LOGITECH MOUSEMAN (BUS)	48
LOGITECH TRACKMAN (SERIAL)	85
MICROSOFT WINDOWS 3.1	48
MS-DOS 6 2 SOFTWARE	40

MULTIMEDIA

PANASONIC CD-ROM DUAL SPEED	$150
MITSUMI CD-ROM DUAL SPEED	140
SOUND BLASTER PRO CARD 8 BIT	85
SOUND BLASTER PRO 16 BASIC	110
SOUND BLASTER PRO 16 MULTI-CD	145
EXTERNAL CD-ROM SCSI CASE/35W/P.S.	69
TOSHIBA SCSI CD-ROM INTERNAL XM-3401B 200MS	295
NEC SCSI CD-ROM INTERNAL CRD-510 3X SPEED	325
GOLDEN SOUND MIDI KIT	39
120W HI-FI STEREO SPEAKERS	65
80W HI-FI STEREO SPEAKERS	45
30W HI-FI STEREO SPEAKERS	35
2W STEREO SPEAKERS	8
CD-TITLES 100+	CALL

SUNSHINE EPROM PROGRAMMER

EXPRO-60/80 (TESTER ENHANCE OF EXPRO-60)	$475/545
ADAPTOR (FOR EXPRO-60, EXPRO-80)	CALL
EML-2M PC-BASED EPROM EMULATOR	300
JET-01 HIGH SPEED PORTABLE PROGRAMMER	420
PICKER-20 HAND TESTER	110
RU201/T UV EPROM ERASER	80
EW-901BN PC BASED E(E) PROM PROGRAMMER	80
EW-904BN PC BASED E(E) PROM PROGRAMMER	120
EW-701BN PC BASED E(E) PROM PROGRAMMER	115
EW-704 PC BASED E(E) PROM PROGRAMMER	155
EW-708 PC BASED E(E) PROM PROGRAMMER	250
HEP-801 PC BASED HIGH SPEED 8M E(E) PROM PROGRAMMER	230
HEP-804 PC BASED HIGH SPEED 8M E(E) PROM PROGRAMMER	295
HEP-808 PC BASED HIGH SPEED 8M E(E) PROM PROGRAMMER	450

SONGTECH INTERNATIONAL INC.

46560 FREMONT BLVD. #106 • FREMONT, CA 94538 • (510) 770-9051 • FAX: (510) 770-9060

PRICES SUBJECT TO CHANGE W/O NOTICE • NOT RESPONSIBLE FOR TYPOGRAPHIC ERRORS

9 Years #1 FRIENDLY SERVICE

Pentium 90 PCI

- **Intel Pentium** 90 CPU
- **Intel Motherbd** - 3 PCI, 4 ISA Slots
- 420MB IDE Hard Disk
- Enhance 101-key Keyboard
- 8MB High Speed RAM
- Medium Tower Case
- 250W Power Supply
- 1.44MB Floopy Supply
- 2 High Speed Serial, 1 Parallel Port
- PCI IDE Controller
- **Diamond** SpeedStar 64 PCI w/1M
- **Impression** 14" Non-interlace SVGA monitor

$2269

Pentium 66 PCI w/SVGA	**$2029**
Pentium 66 VLB w/SVGA	**$1959**
Pentium 60 VLB w/SVGA	**$1859**

486 DX2-66 VLB

- **AMD** 486 DX2-66MHz CPU
- 256K Cache
- 4MB High Speed RAM
- 170MB IDE Hard Disk
- Enhance 101-key Keyboard
- **Acer** 3 VLB, 4 ISA Slots
- Mini Tower Case w/250W PS
- 1.44MB Floppy
- IDE I/O Card
- 14" NI monitor
- VLB SVGA w/1MB

$1139

486DX2-50 VLB system	**1089**
486DX-33 VLB system	**1124**
486DX-40 VLB system	**1079**
486SX-33 VLB system	**989**
486DLC-40 VLB (Opti)	**979**
280MB ... add $50	**420MB ... add 100**
340MB ... add $80	**540MB ... add 175**
8MB / 16MB ... add	**$160 / $400**

Multimedia Notebook

- **Intel** 486 SX-33SL CPU
- 8KB built-in Burst Cache
- 4MB (8, 16, 20 or 32 optional)
- 1MB Flash ROM Programmable BIOS
- 32-bit VLB Windows Accelerator Video Card w/1MB support 1024x768 at 256 colors
- 9.5" Monochrome display upgradable to Dual Scan or Active Color
- 258MB Hard Disk (344MB / 540MB optional)
- 1.44MB Removable Floppy Drive
- PCMCIA: 2 Type II Slots or 1 Type III Slot
- 86-key Reverse-T Keyboard
- Built-in 25mm Trackball at Center
- Built-in Audio Chip, Microphone & Speaker, Record, Compress, Playback sound to Disk MS Sound System & Sound Blaster Compatible, WIN 3.1 Recorder * Media Player Compatible
- Ports: 1S, 1P, 1 Ext. SVGA, 1 Ext. Keybd, w/160 pin Docking Station Port 1 Line-In, 1 Line-Out & Microphone Jack
- Power: 4 Hr to 8 Hr with "Double Life" Technology, Auto Switching AC/DC Adaptor 1.5 Hour Fast Battery Charge, Power Saving, Doze, Sleep & Suspend
- Software: MS DOS 6.2

Special Introductory

$1545

486 DX2-66, 340MB, Dual Scan Color	**$2295**
486 DX2-66, 520MB, Active Color	**$3485**

Case

Mini AT	w.200W power	65
Mini Tower	w.200W power /Black	65/95
Mid-Tower	w.250W power /Black	78/115
Full Tower	w.250W power /Black	115/145
P100 Super Slim 2 Bay w.130W		74

External Drive Case

1xhalf Ht.w.60W P.S	71
2xhalf Ht.w.60W P.S	95
3xhalf Ht.w.60W P.S	119

CD-ROM

backpack

External, 2x speed, Parallel port, 250ms, 350kb/s Multisession Photo CD compatible	355

CREATIVE
CREATIVE LABS, INC

Discovery CD 16 Multimedia Kit, w.Sound Blaster 16 stereo card, Internal, 320ms, Double speed, speaker, Software includes Encyclopedia, The Animals, Toolworks	325
Discovery CD 8 M-media Kit w.S.Blaster Pro	279
Edutainment CD 16 Multimedia kit, w.Sound Blaster 16 stereo card, Internal, 320ms, Double speed, speaker, Software includes Encyclopedia, Toolworks, Indianapolis 500	399
DigitalEdge 3X CD Multimedia kit, w.Sound Blaster 16 w.ASP chip, internal, 195ms, Triple speed, speaker, Microphone, Software includes MS Bookshelf, Works for Windows	689

CHINON

CD-535, Double speed, 220ms, 300kb/s, SCSI-2, Multisession Photo-CD compatible, 256k buffer,	
CDS535 internal CD ROM w.caddy	299
CDS535 internal CD ROM w.SCSI controler, software, cable	324
CDX535 external CD ROM w.caddy	415
CDX535 external CD ROM w.SCSI control, software, cable	445

NEC

CDR 510 int. 3X sp. 195ms 450 kb/s, SCSI	349
3Xi SCSI internal 3X sp. 195ms, 450kb/s	425
3Xe SCSI external 3X sp. 195ms, 450kb/s	475
3Xp SCSI portable 3X sp. 250ms, 450kb/s	385
4X Pro SCSI ext. quad sp.180ms, 600kb/s	919

Panasonic Office Automation OA

562 320ms 300 kb/s internal / w.ctrl	145/155

PLEXTOR

DoubleSpeed PLUS, 240ms 335kb/s SCSI-2, multisession, PhotoCD capable DM3028 internal / w.SCSI card, caddy	255/299
DM5028 external / w.SCSI card, caddy	359/399
T130 Trantor SCSI card w. S/W	44

SONY.

33A internal, 320ms, 300kb/s, double speed, multisession, Photo CD capable, w/card	**129**
7205 ext. sony bus w/OPA-XIO kit, 340ms	489

TOSHIBA

3401B int.SCSI-2, 200ms, 330 kb/s, double speed, multisession, PhotoCD capable	285
3401E ext.SCSI-2, 200ms, 330 kb/s, double speed, multisession, PhotoCD capable	399

Others

CD ROM CADDIES	6
Audio cable —CD ROM to sound card	5

SPEAKERS

Labtec

cs 150	18
cs180	23
cs 550	29

Controllers

adaptec

1510A	16-bit SCSI CD ROM kit, wo FD	89
1522AK	16-bit SCSI-2 kit w. drives, cable	135
1542CF	16-bit SCSI-2, 2 FD, 7 Device	179
1542CFK	16-bit SCSI-2 KIT w. drives, cable	235
1640KIT	SCSI-2 KIT MicroChannel, wo FD, w. drives, cable	325
2742AT	32-bit EISA fastSCSI-2 / w.kit, drives, cable	289/309
2842VL	32-bit VLB fast SCSI-2/ w.kit, drives, cable	235/260
2940	32-bit PCI Fast SCSI-2/ w.kit, drives, cable	299
460	Slim SCSI KIT, PCMCIA 2	289
T130	8-bit SCSI w.BIOS No Floppy	55

BUSLOGIC

BT445S VESA fastSCSI 10 MB/s / KT445S kit w. W-190	189/199
BT545S ISA fastSCSI 10 MB/s / KT545S kit w. W-190	182/205
BT742A EISA SCSI 5MB/s / KT742A kit w. W-190	297/319
BT747S EISA fastSCSI 10 MB/s / KT747S kit w. W-190	343/365
KT946C PCI fastSCSI 10 MB/s kit w. W-190	309
SW190 software driver collection	49

DATA TECHNOLOGY CORPORATION

2278VL	VLB 2F-3H-2S-1P-1G	29
2280	ISA 2F-2H-2S-1P-1G	20
3270VL	VLB SCSI-2 3F-7 Device	129
3280AS	ISA SCSI 16-bit 4FD	105
3290	EISA SCSI-2,Caching up to 16MB, 4FD	499

FUTURE DOMAIN

TMC 850MCD SCSI 8 bit w.CD-ROM driver & power SCSI	58
TMC 1670SVP 16-bit ISA SCSI-2, Value Pack 25pin w. driver & power SCSI	149
TMC 1680SVP 16-bit ISA SCSI-2, Value Pack 50pin w. driver & power SCSI	145
TMC 3260SVP 32-bit PCI SCSI-2, Value Pack 50pin w. driver & power SCSI	199

PROMISE TECHNOLOGY, INC.

DC200 ISA 2F-4H IDE, w.0k Exp. 16MB	89
DC200M ISA 2F-4H IDE, w.512k Exp. 16MB	125
420VLB, 2F2H2S1P IDE w.512K Exp. 16MB	109
DC4030VL VLB, 2F-4H IDE, Exp. 16MB	119

UltraStor CORPORATION

14F	ISA SCSI-2, 3FD-7 Device	179
24F	EISA SCSI-2, 3FD-7 Device	349
34F	VLB SCSI-2, 3FD-7 Device	249

CHICOTEC

IDE I/O	2FD/2HD/2S/1P/1G	15
VLB IDE I/O	2FD/2HD/2S/1P/1G	20

CPU & Math-Co

AMD 486DX-40/DX2-50/DX2-66	193/209/269
Intel 468DX-33/DX2-50/DX2-66	250/267/285
Cyrix 486 DLC-40	87
Cyrix Math-Co 387-40	40
Intel Pentium 60/66/90	580/700/760

Digitizers

SummaGraphics .. Call for best price

Drives

CONNER

213MB	IDE	CFS-210A	14ms	1" X 3.5"	179
340MB	IDE	CFA-340A	13ms	1" X 3.5"	229
420MB	IDE	CFS-420A	14ms	1" X 3.5"	229
540MB	IDE	CFA-540A	12ms	1" X 3.5"	309
1.08GB	IDE	CFA1080A	9.5MS	1"X 3.5"	669
340MB	SCSI	CFS340S			289
540MB	SCSI	CFS540S			429
1.06GB	SCSI	CFP-1060S	10ms	1" X 3.5"	649

FUJITSU

1.06GB	SCSI-2	M2694ESA	10ms	1/2" X 3.5"	699

IBM

280MB	IDE	280A	ms	1" X 3.5"	219
340MB	IDE	340A	ms	1" X 3.5"	237

Maxtor

170MB	IDE	7171A	14ms	1" X 3.5"	175
345MB	IDE	7345A	14ms	1" X 3.5"	249
540MB	IDE	7546A	12ms	1" X 3.5"	319
540MB	IDE	7540A	8.5MS	1"X3.5"	339
290MB	SCSI	7290S	14ms	1" X 3.5"	267
345MB	SCSI	7345S	15ms	1" X 3.5"	330
540MB	SCSI	540S	8.5ms	1" X 3.5"	415

Quantum

210MB	IDE	210A	15ms	185
270MB	IDE	270A	16ms	226
340MB	IDE	340A	12ms	262
540MB	IDE	540A	12ms	329
540MB	SCSI	540S	12ms	360
1.0GB	SCSI-2	1080S	9.5ms	695
1.2GB	SCSI	1225S	9ms	750
1.8GB	SCSI-2	1800S	10ms	1010

TEAC.

1.2MB 5.25" floppy drive	48
1.44MB 3.5" floppy drive / w. frame	38/42
2.88MB 3.5" floppy drive	85
1.2MB + 1.44MB Combo floppy drive	98

WESTERN DIGITAL

340MB	IDE	2340A	12ms	240
540MB	IDE	2540A	12ms	360

I/O Card

Wiseland

Serial (1S) / Printer (1P)	15/15
AT I/O 2S/1P/1G	18
Super fast IDE I/O 2S1P1G (16552) card	45
IDE I/O 2FD/2HD/2S/1P/1G	18

Keyboard

Focus

FK2001 101 key	45
FK9000 programmable 129 key & calc.	65
Keytronic 101 key	38
Monterey K208 101 key	24
Maxi 101 key	36
B101 Black color 101 key	45

Memory

1MB x 9 (1MB)	SIMM	40
4MB x 9 (4MB)	SIMM	155
1 x 36 (4MB)	SIMM	159
2 x 36 (8MB)	SIMM	310
4 x 36 (16MB)	SIMM	599

Modem & Fax

AT&T

Dataport 14.4 S/R FxMod w.Quicklink-2 S/W Int/Ext.	169/189
Keep in Touch PCMCIA 14.4 S/R FxMod, Selected Cellular Phones	305

BOCA

144I 14.4 S/R MNP5 w.Windows & DOS Data/Fax S/W Int./Ext.	127/150
28K V.Fast 28.8/14.4 Mod/Fax Int./Ext.	205/249
PCMCIA 14.4 Data/Fax DOS & WIN S/W	285

GVC.

FM144HV 14.4 S/R FxMod int./ext.	119/137
PCMCIA FM96/24VP / *FM144/144VP	135/*239

Hayes

Accura 96 + Fax96, 9600 S/R int/ext	159/175
Accura 14.4 + Fax144, 14.4 S/R int/ext	169/185
Accura 28.8 VFC 28.8/14.4 Mod/Fx Ext.	399
PCMCIA Optima 144 + Fax144 S/R	295

intel.

FaxModem 144/144 S/R Int/Ext	127/147
PCMCIA FaxModem 144/144 S/R	255
SatisFaxtion 400 144 S/R FxMod int/ext	265/318

Megahertz

Pocket 144 S/R FxMod P2144	249
PCMCIA 144 S/R FxMod w.XJACK XJ1144	285
PCMCIA 9600 S/R FxMod w.XJACK XJ196	245

USRobotics

Sportster Fax 144 S/R int/ext	119/139
PCMCIA 144 S/R FxMod	269

Zoltrix

V.Fast 288, 288 Modem, 144 S/R Fax, Int,	219
144/144 14.4 S/R Fax Modem, Int/Ext	99/129
96/24 Int. 96 S/R Fax, 24 Modem	55
9648/24 Int. 96 Sent 48 Receive, 24 modem	45
VoiceFax 144/144 ,Int., 144 S/R Fax , 144 Modem, w.Voice Messaging Capability Bundle w. speaker & microphone	149

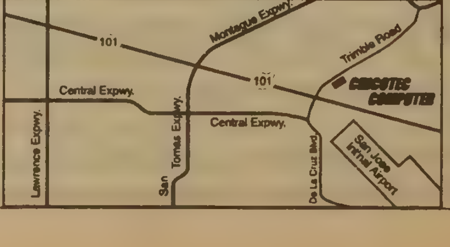
Motherboard

MX 386-40 w/CPU	99
VLB 486-33/50/66 128/256k w/o CPU	115/125
PCI 486 w/256k w/o CPU	159
Pentium 60/66 PCI w/512k w/o CPU	290
Pentium 60/66 VLB w/512k w/o CPU	255
Pentium 90 PCI w/512k w/o CPU	520
Pentium 90 VLB w/512k w/o CPU	520

CHICOTEC COMPUTER

542 West Trimble Road, San Jose, CA 95131
Tel: (408) 954-8998 Fax: (408) 954-1135
Mon - Fri: 9 am - 6 pm Sat: 10 am - 4 pm
Just One Block From 101

VISA MasterCard



- All prices are subject to change without notice.
- Corp., Gov't. and Educ. Purchase orders are welcome and subject to credit approval.
- All returns are subject to 15% restocking fees.
- No refund after 30 days.
- Shipping, Insurance and COD charges are extra and non-refundable.
- Not responsible for typographical errors.

Always YOUR COMPLETE PC CENTER

System Upgrade Center

MEMORY UPGRADE

2MB upgrade to 4MB	$160
4MB upgrade to 8MB	$160
8MB upgrade to 16MB	$620/*$396

** with memory trade-in program*

HARD DISK UPGRADE

170MB	$175	420MB	$229
210MB	$185	540MB	$309
280MB	$209	1.08GB	$649
340MB	$219		

IDE I/O card / VLB IDE I/O card	$18 / $20
Hard disk installation	$35
Hard disk installation + data transfer	$75

386 UPGRADE TO 486

	Cyrix	AMD	Intel
486DX-33	$261	$278	$346
486DX-40	$272	$290	n/a
486DLC-40	$192	n/a	n/a
486DX2-50	$290	$334	$350
486DX2-66	n/a	$355	$390

** Motherboard with CPU upgrade subject to $75 labor charge*

CPU UPGRADE

	Cyrix	AMD	Intel
486DX-25 to 486DX2-50	$175	$219	$235
486DX-25 to 486DX2-66	n/a	$240	$285
486DX-33 to 486DX2-66	n/a / *n/a	$240 / *$169	$285 / *$185
486DX2-50 to 486DX2-66	n/a / *n/a	$240 / *$140	$285 / *$185

** with CPU trade-in program / $25 labor charge for all CPU upgrade*

Best Buy

SONY 33A $129

Double Speed CD-ROM Drive

- 300 KB/sec Transfer Rate
- 320ms access time
- Controller Card
- Installation software
- Data and audio Cable
- Multisession Photo CD

w/16-bit sound card $189

CTX 17" Monitor

CTX 1760LR
Low radiation
Non-interlace

.28mm
1280X1024
Flat screen

$649

CTX 1765GM 17" .27mm 1280X1024	679
CTX1562GM 15" .28mm 1280X1024	339

Monitor

Acer

33D 14" 1024x768 .28NI	255
56L 15" 1024x768 .28NI Flat,	345
76i 17" 1280x1024 .28NI Flat,	699

CTX

6468/6468ES/6468GM 14" 1024x768 .28	245/250/258
1451/1451ES/1451GM 14" 1024x768 .28 NI	255/259/269
1462ES 14" 1024x768 .28 NI, MAC	295
1562ES/1562GM 15" 1280x1024 .28 NI, flat, MAC	345/352
1760LR 17" 1280X1024 .28 NI flat	680
1765GM 17" 1280x1024 .27 NI, Flat, Mac	725

Impression

3428Green/3428NIG 14" 1024x768 .28	229/239
5528G 15" 1280x768 .28 Flat, NI,Green	339
1726NG 17" 1280x768 .26 ,NI Flat Green	699

MAG INNOVISION

DX15F 15" 1280x1024 .28	395
DX17F 17" 1280x1024 .26	725
MX15F 15" 1280x1024 .28 NI Flat	479
MX17FG 17" 1280x1024 .26 NI Flat	849
MX21F 21" 1600x1280@60Hz .28 NI Flat, Green, Mac	Call

NANAO

F340iW 15" 1024x768 .28 NI Flat	639
F550i 17" 1280x1024 .28 NI	899
F550iW 17" 1280x1024 .26 NI	999
F560iW 17" 1280x1024 .26 NI Green	1239
T560i 17" 1280x1024 .25 NI	1479
T660i 20" 1280x1024 .31 Trinitron	1999
F760iW 21" 1280x1024 .31 NI	1919
F780iW 21" 1600x1280 .26 NI	3099

NEC MultiSync

SVGA 14" 1024x768 .28 NI.	335
3V 15" 1024x768 .28 NI Flat Mac,ES	475
3FGe 15" 1024x768 .28 NI Flat Mac 60Hz	575
4FGe 15" 1024x768 .28 NI Flat Mac 76Hz	629
5FGe 17" 1024x768 .28 NI Flat Mac 76Hz	989
5FGp 17" 1280x1024 .28 NI Flat Mac 74Hz	1125
6FGp 21" 1280x1024 .28 NI Flat Mac 74Hz	1995

SONY MultiScan

1430 14" 1024X768 .25 NI 72Hz Flat MAC	525
17SE 17" 1600x1200 .25 NI 72Hz Flat MAC	1025
1730 17" 1024x768 .25 NI 72Hz Flat MAC	965
2038 20" 1600x1200 .30 NI 72Hz Flat MAC	1995

ViewSonic

6E 14" 1024x768 .28 NI	299
15 15" 1280x1024 .28 NI Flat MAC	455
15EX 15" 1024x768 .28 NI Flat	395
17 17" 1280x1024 .27 NI 72Hz Flat MAC	979
20 20" 1600x1280 .28 NI 72Hz MAC	1579
21 21" 1600X1280 .25 NI 72Hz Flat MAC	1815

OTHERS

SIIG 9" VGA paper white	125
B14N Black 14" 1024X768 .28 NI	299
B14R Black 14" 1024X768 .28	279

Mouse

Artec

LE160 Serial,3-button,400 DPI	15

KENSINGTON

Expert mouse 4.0 ser. Trackball	95
Expert mouse 4.0 Bus, Trackball	117

LOGITECH

First Mouse, serial, 3-button	30
Mouseman serial & PS/2, 3-button, 400DPI	52
Mouseman Bus, 3-button, 400DPI	65
Mouseman Cordless II , 3-button, 400DPI	85
Trackman II,serial & PS/2, 3-button, 320DPI	75
Trackman Portable, 3-button, serial & PS/2	65

Microsoft

V2.0 400dpi, 2-btn, ser. / PS/2 / OEM	65/69/39
V2.0 400dpi, 2-btn, Bus / OEM	89/66
Ballpoint Trackball 2.0 PS/2, 400DPI, 4-btn.	86
Ballpoint Trackball 2.0 w. Windows 3.1	159

MOUSE SYSTEMS

MOUSE, 2-btn, 350dpi, serial, Opt-Mech	21
New Mouse, 3-btn, 400dpi, serial&PS/2	40
PC mouse, 3-btn, 300dpi, serial, optical	40
PC mouse III, 3-btn, 300dpi, ser&PS/2, opt.	59
PC Trackball II, 3-btn, 680dpi	46

Network

3Com

3C503 Etherlink II TP/Coax	185/175
3C509 Etherlink III TP/Coax/Combo	129/129/149

ARTISOFT

AE-2 Ethernet Card	199
AE-3 Ethernet Card	215
Starter kit 6.0 2 users	369
NR-SI 2000C/2000T	87/90

intel

Ether Express 16 Coax/TP	125/125
Ether Express 32 EISA	459

NOVELL

Microdyne NE 2000 TP	99
NE 2000 T Plus Ethernet TP	109
NE 3200 Eagle EISA Coax	495

SMC

Ethercard + Elite 16 Coax/TP/Combo	129/129/149
Ethercard Plus Elite 32 Coax/TP	589/589

Note Book

Acer, Acom, Toshiba, IBM ... Call

Power Supply

200W mini tower power supply	48

Printer

Canon BUBBLE JET

BJ-200E 248cps, 360dpi	309
BJ-230 248cps, wide, 360dpi, 11x17	449
BJC-600 color, 240cps, 360dpi	599

CITIZEN

GSX 220 24 pin, color cap.240cps	179
GSX 230 24 pin, color cap.270cps 360dpi	225
GSX 240 24 pin, color cap. 300cps, 360dpi, w.scalable fonts	289
Color kit / Color ribbon / black ribbon	55/22/9
Projet II Inkjet, 300dpi, 3ppm, 70 pg feeder	295
PN48/PRO Portable notebook printer, battery, 360dpi, 2 ribbons	229

HEWLETT PACKARD

DeskJet 520	285
DeskJet 550C	435
DeskJet 560C	565
DeskJet 1200C	1415
DeskJet 1200CW/PS	2095
LaserJet 4L/4ML	649/975
LaserJet 4P/4MP	959/1355
LaserJet 4+/4M+	1395/1895
LaserJet 4SI/4SIMX	2895/4375

Panasonic Office Automation OA

2123 24pin color capable, 240cps, 10 fonts	245
3123 24pin color capable 240cps, 10 fonts	269
2124 24pin color capable, 320cps, 12 fonts	325
3124 24pin color capable, 320cps, 12 fonts	339
2624 24pin, wide, 300cps, 11 fonts, 26k	399
3624 24pin, wide, 300cps, 12 fonts, 58k	409
1695 9pin 132-column, 330cps, 16k	369

Accessories

KXP150/155 black ribbon for 2123, 2124, 3123, 3124 / 2624, 3624	14
KXP150C 4-color ribbon for 2123, 2124, 3123, 3124, use w.kit	27
KXPCK11 color kit for 2123/2124/3123/3124	66

Laser Printer

4400 Sidewriter, 4ppm, 300dpi, 28 fonts, 512k upgrade to 4.5mb	495
4410 Laser, 5ppm, 300dpi, 28 fonts, 512k upg. to 4.5mb	545
4430 Laser, 5ppm, 300dpi, 8 outline & 28 int.fonts, 1mb upg. to 5mb	669
4440 Laser 10ppm, 300dpi, 28 fonts, 1mb upg. to 5mb	1025
5400 PostScript ver. of 4400 w. 17 fonts	799

Seiko Instruments

Smart Label Printer Plus	159
Smart Label Printer Pro	243

TEXAS INSTRUMENTS

MicroMarc Ink Jet printer, 300cps, 300dpi, 100 sheet feeder	299
MicroWriter Laser Basic, 5ppm, 300dpi, 512k up to 4.5mb, 12 fonts	569
MicroWriter PS23 PostScript, 5ppm, 300dpi, 2mb up to 4mb, 23 fonts	699
MicroWriter PS65 PostScript, 5ppm, 300dpi, 2mb up to 4mb, 65 fonts	985
MicroLaser Pro23, 8ppm, 600dpi, 6mb up to 22mb, 23 fonts	1399
MicroLaser Pro65,8ppm,600dpi,6mb up to 22mb,65 fonts,	1599

Scanner

Call for Best Price

Sound Card

Sound CREATIVE CREATIVE LABS, INC.

Sound Blaster Deluxe value	59
Sound Blaster Pro, 8 bit, value w.S/W	79
Sound Blaster 16 value, w.S/W	96
Sound Blaster 16 MultiCD for CD ROM, w.S/W	135
Sound Blaster 16 MultiCD w.ASP	169
Sound Blaster 16 SCSI	169
Sound Blaster 16 SCSI w.ASP	199
Sound Blaster AWE32	265

MEDIA VISION

Pro Audio Spectrum 16, ISA, stereo, S/W	89
Pro Audio Studio 16, w.compression	119

Tape Backup

COLORADO MEMORY SYSTEMS INC.

DJ 20 JUMBO 250, 250MB Int.	169
Trakker 250MB, Parallel port, Ext.	329
Back up for Windows S/W	39
FC-20 Tape controller	79
Power Tape 1 GB SCSI,DC6525 tape, Int	659
Power Tape 2 GB SCSI QIC w.ISA controler Int / Ext	989/1129
Power Tape 4 GB SCSI QIC w.ISA controler Int / Ext	1199/1429
PowerDAT 600 4GB(comp.) w.adapter S/W Int / Ext	1219/1429

CONNER

TapeStor 250MB w/1 cartridge int/ext	149/325

SCSI Back-up Drives

VIPER 2150S, 250MB, 5.25" HH, DC6250 int/ex	345/455
VIPER 2525S, 525MB, 5.25" HH, DC6250 int/ext	475/575
2750S 1.35GB, 1/4" cartridge, 5.25" HH, bare dr. Int/ext	769/909
4320RW 2GB DAT, 4mm DDS, 3.5", w.back up Exec S/W Int/ext	969/1089
4320NT 2GB DAT, 4mm DDS, 3.5", Int/ext	879/999
4324NP 4GB DAT, 4mm DDS, 3.5", Turbo Int/ext	1079/1189

Accessories

3M DC 2120F formatted tape cartridge	15
SONY QD6250 250mb	20
3M DC6250 250mb, QIC-150 pre-formatted	24
3M DC6525 525mb, QIC-525 pre-formatted	29
SONY 90m DAT 4mm	16

backpack Micro Solution

250MB Ext. 3.5" QIC-80, printer port, S/W	355

Video Card

ATI

Graphic Wonder 1MB 1280x1024, 16.7m, ISA/VLB	162
Graphic Ultra + 2MB 1280x1024 ISA	220
Graphic Ultra Pro 2MB 1280 ISA/ VLB/PCI	299/329/355
Graphic Pro Turbo 2MB 1280 VLB or PCI	455

Cardex

Cardex VLB 1MB 16.7M color	89

DIAMOND

SpeedStar Pro ISA or VLB 1MB	125
SpeedStar 64 ISA or PCI 1MB/2MB	175/215
Stealth Pro ISA or VLB 1MB/2MB	243/330
Stealth 24 ISA or VLB 1MB	159
Stealth 32 ISA or VLB or PCI 1MB/2MB	179/235
Stealth 64 VLB or PCI 2MB/4MB	355/485
Viper VLB / PCI 2MB	345/365
Viper Pro ISA 4MB	call
Video Star video capture & playback board w.S/W	329
Sonic Sound LX 16bit CD quality	119

Number Nine

GXE Level 10,1MB VRAM, ISA/VLB	259
GXE Level 11, 2MB VRAM, ISA/VLB	345
GXE Level 12, 2MB VRAM, 1MB cache ISA/VLB	419
GXE Level 14, 4MB VRAM, ISA/VLB	635
GXE Level 16, 4MB VRAM, 200MHz RAMDAC ISA/VLB	795
GXE64 1MB DRAM Power Pac S/W VLB/PCI	189
GXE64 2MB DRAM Power Pac S/W VLB/PCI	259
GXE64PRO 1MB VRAM Power Pac Plus VLB/PCI	369
GXE64PRO 2MB VRAM Power Pac Plus VLB/PCI	539
GXi Lite Graphics Level 21, 1MB VRAM, 1280	755
GXi Graphics Level 25, 2MB VRAM, 1280	1279
GXi TC Graphics Level 29, 4MB VRAM, 1280	1399

ORCHID

Fahrenheit 1280+ VLB, 1280x1024, Windows acc. 1MB / 2MB	145/189
Celsius VLB, 1280x1024(1mb), 1600x1200(2mb) 1MB / 2MB	175/235
Kelvin 64, VLB or PCI, 1280x1024, Windows acc. 1MB / 2MB	185/235

PURCHASE ORDERS WELCOME

CHICOTEC COMPUTER

542 West Trimble Road, San Jose, CA 95131
Tel: (408) 954-8998 Fax: (408) 954-1135
Mon - Fri: 9 am - 6 pm Sat: 10 am - 4 pm
Just One Block From 101

Internet Faxing

continued from page 148...

the cover page:

Please deliver this facsimile to:
Arlo Cats
Room 123

Note: There's another way to address faxes which some folks say is more reliable, although it's a bit harder to address. This method writes the phone number backwards, separating each number by periods.

To: remote-printer.Arlo_Cats/Room_123@2.1.2.1.X.X.X.2.0.2.1.tpc.int

The following addresses can be used to obtain more information:

tpc-coverage@town.hall.org—current-fax coverage (automated reply)

tpc-faq@town.hall.org —Frequently Asked Questions (automated reply)

tpc-rp-request@aarnet.edu.au—discussion list maintainer (human)

Swedish University Network

The Swedish University Computer Network (SUNET) has a national fax service that can be used by anyone at no cost. Users in Sweden can use it to send faxes all over the world, but users outside Sweden can only use it for telephone numbers within Sweden.

To send a fax to Arlo Cats +46-87654321 (that's international notation for Sweden, make-believe phone number 08/765 43 21) send email to: Arlo_Cats@ F087654321 .fax.sunet.se

Note that you will always have to preface the phone number with the letter "F" for "fax".

For more information, email "faxmaster@fax.sunet.se".

Digital Chicken

Digital Chicken is—or was—a service that let users send faxes to Canadian government and citizens. According to the management of Digital Chicken, the service will be shut down in the near future: there is a branch of the TPC.INT remote faxing service (explained above) that covers Canada. The management feels there is no need for two fax services covering the area.

InterFax

InterFax allows you to send faxes via email within the US or internationally. InterFax is a fee-based service (billed to your credit card) but, unlike the services listed above, InterFax lets you send faxes anywhere, not just select locations. As of this writing, InterFax costs $5 per month, which includes the first five fax pages. Additional pages cost 50 cents each. There is a one-time sign-up charge of $25. For further information, send email to faxmaster@pan.com, or contact InterFax at PO Box 162, Skippack, PA 19474. (215)584-0300. Fax: (215)584-1038.

FAXiNET

Another fax-by-mail service is FAXiNET, which lets you send any text (ASCII) or PostScript documents to fax machines worldwide. FAXiNET can send faxes to more than fifty countries and plans to add more. The company can also receive faxes for you, which will be delivered to you via electronic mail.

Accounts for individuals cost 75¢ per page, plus a one-time $20 activation fee. Additional services, including adding your custom logo and signature to your faxes, are available at an extra cost. Corporate accounts are also available. More informa-

LOOK NO FURTHER...
WE HAVE EVERYTHING YOU'RE LOOKING FOR–CALL AND BE AMAZED!

AT PORTABLE COMPUTER CENTER WE ARE ABLE TO CUSTOM BUILD ANY DESKTOP CONFIGURATIONS INTO OUR PORTABLES TO SUIT YOUR NEED. PLEASE CALL FOR OPTIONS LIKE INTERNAL CD ROM, TAPE BACKUP SYSTEM, UP TO TWO GIGABYTE IDE, ESDI, OR SCSI HARD DISKS.

HI CONTRAST VGA PLASMA PORTABLE

150:1 RATIO 101 KEY

- 4 MB Memory (Expandable To 32 MB)
- 1.2 MB & 1.44 MB Floppy Disk
- 210 MB IDE (13ms) HD
- SVGA Card w/1 MB Win Accl.
- 2 Serial/1 Parallel Ports
- 200 Watt PS/110/220 V
- Plasma Display On/Off Switch
- External Display Up To (1280 x 1024)
- 3 Free Slots/Deluxe Carrying Bag
- PENTIUM 90/66/60 MHz 256K CACHE...... CALL
- 486DX4-100 MHz 256K CACHE 2495
- 486DX2-66 MHz 256K CACHE..............2145
- 486DX-33 MHz 256K CACHE............... 1975
- 486SX-33 MHz 256K CACHE............... 1845
- IBM 486BL-75 MHz 256K CACHE............ 1995
- IBM 486SLC-66 MHz 256K CACHE........... 1895

1024 X 768 9.5"

- 4 MB RAM (Up To 32 MB)
- 210 MB IDE (13ms) HD
- 1.2 MB & 1.44 MB Floppy
- 2 Serial/Parallel Ports
- SVGA Card w/1 MB
- 4 Free Expansion Slots
- Deluxe Carrying Bag
- DX4-100 MHz VLB/ISA 256K CACHE $2595
- 486DX2-66 MHz VLB/ISA 256K CACHE 2245
- 486DX-33 MHz VLB/ISA 256K CACHE 2075
- 486SX-33 MHz VLB/ISA 256K CACHE. 1975
- IBM 486BL-75 MHz VLB/ISA 256K CACHE 2095
- IBM 486SLC-66 MHz VLB/ISA 64K CACHE 1995

*SONY 10" TRINITRON 26mm CRT PORTABLE...... SCALL

ALL PORTABLES AVAILABLE IN PCI, EISA LOCAL BUS, ISA VESA LOCAL BUS & MULTIMEDIA OPTIONS!

VGA PAPER WHITE LCD LUNCHBOX PORTABLE

- 486DX4-100 MHz 256K CACHE. $2095
- 486DX2-66 MHz 256K CACHE. 1745
- 486DX-40 MHz 256K CACHE 1575
- 486SX-33 MHz 256K CACHE 1495
- IBM 486BL-75 MHz 256K CACHE 1695
- IBM 486SLC-66 MHz 64K CACHE 1595
- CASE w/VIDEO BOARD ONLY 795

- 4 MB RAM (exp 32 MB)
- 210 MB IDE Hard Drive
- 1.2 & 1.44 Floppies
- 2 Serial/Parallel Ports
- 3 Free Slots/Carrying Bag
- Support Simultaneous Display on Internal LCD Ext. Color Monitor

DESKTOP MONTHLY SPECIAL

PENTIUM 90/66/60 ....$CALL
486DX4-100 MHz VLB, ISA.......CALL
486DX2-66 MHz VLB, ISA.........CALL
486DX2-50 MHz VLB, ISA.........CALL
486DX-40 MHz VLB, ISA............CALL
486DX-33 MHz VLB, ISA............CALL

ALL SYSTEMS ABOVE INCLUDE:

- 4 MB RAM
- 212 MB IDE H. Disk (13ms)
- Teac 1.2 MB and 1.44 MB Floppies
- SVGA Monitor (1024x768 .28 dpi)
- SVGA Video Card w/1 MB
- IDE 2HD/2FD Controller
- 2 Serial/Parallel/Game Port
- Enhanced 101 Keyboard
- Mini Tower or Desktop Case

★ FREE 3-Button Mouse & Gift

UPGRADE ADD:
340 MB Hard Drive..........$70
420 MB Hard Drive..........90
540 MB Hard Drive..........200

PLEASE CALL FOR:
Other Configurations
System Upgrade/Repair
Hardware/Software Installation
PRICES SUBJECT TO CHANGE W/O NOTICE
PRICES REFLECT CASH DISCOUNT

DUAL SCAN LCD COLOR LUNCHBOX PORTABLE $CALL

DRIVES/CONTROLLERS

CONNER 1.06 GB SCSI-2..........$645
CONNER 540 MB IDE..........305
CONNER 420 MB IDE..........225
CONNER 340 MB IDE..........215
CONNER 210 MB IDE..........175
W. DIGITAL 540 MB IDE..........325
W. DIGITAL 420 MB IDE..........245
W. DIGITAL 210 MB IDE..........180
NEC, TOSHIBA, PANASONIC CD-ROM..........CALL
Adaptec 1542CF Controller..........175
Adaptec 2842VL w/kit..........275
Promise DC4030VL w/kit..........125

ALL-IN-ONE LAN PC WORKSTATION 486SX or DX SVGA
$CALL

VIDEO CARDS/FAX MODEM

ATI Graphics Ultra-Pro VLB 2MB........$255
ATI Graphics Ultra-Pro PCI 2MB..........255
ATI Graphics Ultra-Pro ISA 2MB..........245
Diamond Stealth VLB w/1 MB..........150
Diamond Stealth ISA w/1 MB..........150
GENOA 8500VLB w/1 MB..........95
14,4/14,4 Fax Modem Int..........95
96/24 Fax Modem Int..........35

MONITORS

SVGA 14" (1024x768 .28)..........$209
SVGA 14" (1024x768 .28) NI..........229
SVGA 15" (1280x1024 .28) NI Full Screen...375
SVGA 17" (1280x1024 .26) NI Full Screen...695
NEC 4FGE 15" (1024 x 768) NI..........605
NEC 5FGE 17" (1024 x 768) NI..........1095
NEC 6FGP 21" (1280 x 1024) NI..........2395

DEALER PRICING & QUANTITY PRICING AVAILABLE
STORAGE SYSTEM ENGINEERING SERVICE
3350 Scott Blvd., Building 19, Suite 1902 (near Bowers Ave.)
Santa Clara, CA 95054

S.F. Lawrence Expwy. S.F.
Central Expwy. Scott Blvd. Bowers San Tomas
N S
S.J. S.J.

408-727-6040
FAX: 408-727-6042
Hours: 10am-6:30pm M-F
12 noon-4:00pm Sat

MasterCard VISA

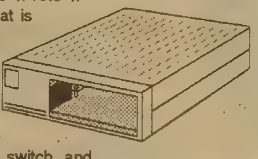
YOUR SOURCE FOR RELIABLE COMPUTERS & PERIPHERALS SINCE 1983

HSC is your first choice for Silicon Valley Super-Specials!

Ask any engineer or technician in the Bay Area who knows what's what, and you'll find out that they all know about HSC. For over 30 years, we have been offering the best selection of electronic parts, test equipment and exotica at super prices! If you haven't tried us yet, it's time to find out for yourself!

The case for external drives...

You could make a case against having external drives if your computer case has enough bays, but if it doesn't, don't make a case, buy this one! It is a 9.5" x 10.5" x 2.25" beige plastic case that is perfect for CD or hard disk drives. It features a fan-cooled 40W power supply, two external SCSI 50-pin connectors (for daisy chain installation) and internal ribbon cable, SCSI device ID switch, and audio cable for Sony-type (4-pin) CD ROM drives. All you need is an IEC power cord (not included) and a drive that needs a home! Incredible break-through price, hurry!



HSC# 14783 **$39.95**

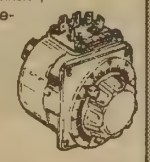
Give your Mac Vision!

With MacVision (and a video camera) your Macintosh will be able to see the outside world! Capture video stills from any composite video source (camera, VCR, video disk) and you can commit a B & W image to a disk file for editing with your paint program. New in the box unit with cables and power supply. Works with Mac II, SE or Plus, System 4.1+

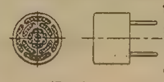
HSC# 80150 $39.95

NeatBitz...

A. Variable Autoformer -- commonly called a "Variac", although that name is a General Radio trademark, and these "Powerstats" are made by Superior Electric. 5A rating, variable 0-140VAC output. Used, open frame (i.e. not in a case) with large knob, dial plate. Very handy to have, no test bench should be without one! HSC# 14752 $37.50



B. Ultrasonic Transducer Emitter/Receiver set -- the kind that are so handy for sonic ranging, intrusion detection or control projects. Identical .63" dia. housings have 40 KHz transducers made by Murata/Erie. Receiver is rated at -68dB min. sensitivity, transmitter is rated at 110dB min. sound level. Sold as a set. Specification diagram included. HSC#14682 $3.95



C. Camera flash unit -- (not shown) consists of a 2" x 2" printed circuit board of irregular shape that has a 1" long strobe tube with lens and reflectormounted on one side, and circutry mounted on the other. Add 1.5 VDC (an AA cell will do), and a momentary switch, and "flash" you're in business! HSC# 14702 $3.95

D. HPIB Cable -- genuine Hewlett Packard (#92220R) HPIB/GPIB interface cable, 1 foot long. Has dual stackable 24-cond. connector at each end (one is right angle). Fully shielded, rugged metal hoods. HSC# 14803 $12.50

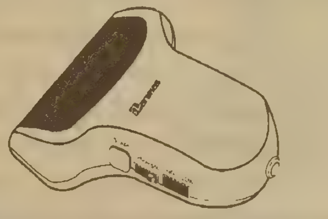
E. Auto Cigarette Lighter Plug w/Coiled Cord -- perfect for radar detectors, handy-talkies, CD players, etc. Coiled cord is 8ft. long, with a set of adaptors for most types of input jacks, good for 2A @ 12VDC. Compare at $9.95 at the Shack! HSC# 14747 $2.95

Can Your Macintosh Read?

Don't re-type that document into your Mac...don't try to paint the Mona Lisa with your mouse...just say "Scan it!" with these handy scanners by Animas!

A. 256 Gray Scale Hand Scanner -- SCSI interface, 100 to 400 dpi, eight-bit (256 shades of gray), 4.134 inch scan path. Image enhancement software with customizable tool & filters palette, edge detection, etc. New in box with adaptors, cables, manual & software. Requires Mac SE/30 or II family, 8-bit video card, 2 MB RAM. 90-day warranty. HSC# 14808 $79.95

B. "Speed Reader" B&W Hand Scanner -- SCSI interface, 100 to 400 dpi, dithered or Black & White modes, 4.134 inch scan path. Handy for scanning halftones. line-art, etc. "MacSee" software is a simple B&W paint program for editing your images. New in box with adaptors, cables, manual & software. Use with your own OCR software (sorry, we don't have any) for text recognition. Requires Mac Classic, SE, LC, SE/30 or II family, 1 MB RAM. 90-day warranty. HSC# 14809 $49.95



It's More than a Game...It's History!

They should make more computer games like this one..."Their Finest Hour -- The Battle of Britain" by Lucasfilm Games. It is a historically accurate depiction of the air battles that convulsed England during the summer of 1940, and you can relive WW II history by flying a Supermarine Spitfire or a Junkers "Stuka" divebomber (or one of six other fighters or medium/heavy bombers). You get a realistic-looking cockpit instrument panel on your screen, and your chosen craft's performance is based on the actual abilities of the planes. One of the best things about this game (leave it to Lucasfilm to excel in this area!) is the book that accompanies it. It starts off with a 45 page history of the war up to this crucial turning point, and is interspersed throughout with period photographs, campaign maps, profiles and quotes of important personalities, and discussions of strategies. There are even diary entries from British and German fliers that give first-hand accounts of what aerial combat was like in those desperate days. All that is left to experience the realism of battle is to climb into your "cockpit", grab the joystick and follow the mission plan you have built. You can even turn on a "cockpit camera" to record your battle for later viewing. This game was one of the most popular flight simulation games going a couple of years ago, now you can fly along with the aces, and if you are good enough, change history! What a way to painlessly absorb a history lesson, by living it! IBM/DOS, EGA/VGA, AdLib compatible. HSC#14694 $9.95

Mark your calendars...You won't want to miss this!

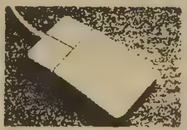
It's the return of HSC's

Giant Anniversary Sale!

Saturday, Sept. 17

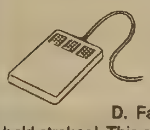
Yes, it's almost time for our End-of-Summer Blowout...and we wanted to give you plenty of notice! Set aside September 17 for a visit to one of our three stores for a one-day extravaganza of closeouts, discounts, one-of-a-kind specials and free refreshments. In addition, our Santa Clara warehouse will be featuring a parking lot sale of bulk goods at incredible prices. All in all, it's a super event you won't want to miss...ask someone who came last year!

Multitudes of Mice!



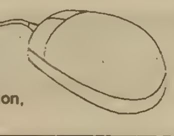
A. High-Quality Optical Mouse (shown at left) -- serial interface (9-pin "D-sub") two-button mouse by Mouse Systems, comes with 7" x 7.75" mousepad. No mechanical parts to wear out or get dirty...no balls to clean! New, with driver disk, OEM version (no book or box). HSC# 14719 $14.95

B. MacPRO mouse -- three-button Mac compatible mouseby Animas (shown at right). 350 DPI resolution, Apple ADB interface (4-pin Mini-DIN) for Mac II, IIc, IIci, IIfx, IIsi, LC, SE, Classic, or other Macintosh computer with ADB port. Programmable "cdev" allows full programmability for all three buttons. You even get a paint program called Colorframe (included on driver disk). New in box with manual, mouse-mat, 90 day warranty. HSC# 14718 $19.95



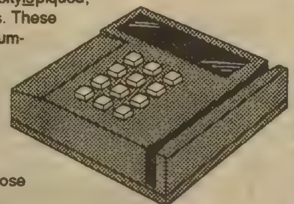
C. Generic Mouse (Super economy version) -- three-button mechanical mouse for 9-pin "D-sub" type serial interface. New OEM version (sorry, no book, software or fancy box), 100% Microsoft Compatible, should work with most mouse drivers. HSC#14673 $4.95

D. Fat Mouse -- For those of you with big hands and bold strokes! This serial-port two-button device is a larger-than-life mouse measuring 4" x 2.5" and 1.25" at the tallest point, and feels comfortably "fat" to the hand. 100% Microsoft Compatible, 200 cpi. opto-mechanical type mechanism. 90-day warranty. New, OEM version, (no box or software). HSC#14087 $7.95



Satisfy your Curiosity!

You've seen them everywhere... department stores, grocery stores, even at HSC! If you haven't wondered what was inside of these little credit card verification terminals, then you are not the normally inquisitive techno-junkie who reads these ads! If your curiosity is piqued, however, then this is your chance to resolve your questions. These used Veriphone Tranz240 transaction terminals have a vacuum-fluorescent alphanumeric 16-character readout, 12-key keypad, Z-80 processor, CMOS program EPROM, and mag-stripe read-head. Some may have the reader disabled, as these were used strictly for keyboard entry, but it should be possible to reconnect it. They were made to communicate with a host computer over a RS-485 line, and use a 8.5 VAC adaptor (sorry, we don't have any of those yet). Quantity discounts available if you ar really curious!



HSC# 14898 **$19.95**

Halted specialties co. **HSC Electronic Supply**

Toll Free (Orders Only) 1-800-4 HALTED (1-800-442-5833)

Retail Stores:

3500 Ryder St., Santa Clara, CA 95051 (408) 732-1573
4837 Amber Ln., Sacramento, CA 95841 (916) 338-2545
6819 Redwood Dr., Cotati, CA 94931 (707) 792-2277

Terms: Some quantities limited; all items subject to prior sale. Minimum order: $10.00 plus shipping. Orders under $20.00 subject to $2.00 handling fee, in addition to shipping. All orders shipped FOB Santa Clara, CA (this means you pay freight!) by UPS Surface (no P.O. Boxes) unless otherwise specified, in which case prevailing carrier rate plus $5.00 handling fee applies. Prepaid orders that don't include shipping charges will be shipped freight COD. There is a $4.00 UPS charge added to shipping charges for COD shipments. If you have questions about your order, please call Customer Service at (408) 732-1854 M-F 9AM to 5PM PST.

There are several options for sending a fax via Internet mail; some are free while others are pay services.

tion is available from AnyWare Associates, FAXiNET, 32 Woodland Rd., Boston, MA 02130. (617)522-8102. Email: sales@awa.com

Unigate

Unigate is another pay-for-use service that allows you to send faxes to Russia and the Commonwealth of Independent States. It also allows you to receive faxes as electronic mail. Unigate is a commercial service that also handles "snail mail." Most of us probably don't need to fax Russia, but if you should need to, Unigate is probably much less expensive than however you're doing it now: fax service from USA to Russia (or back) is $1.59 per page:

For fax service USA to Russia: $1.59/page

fax service from Russia to Canada: 1.79/page

fax service from Russia to Europe: 2.59/page

For postal-mail service USA-Russia: $1/page

snail-mail service from Russia to Canada: 1.50/page

snail-mail service from Russia to Europe: 1.79/page

For more information, email "yuri@atmos.washington.edu".

RadioMail

This email-to-fax service lets you send faxes to just about any country you can name. Prices vary accordingly—it's much less expensive to send a fax to a "well-connected" country (like Canada and Sweden) than less-connected places like Laos and Solomon Island. For instructions, send email to "RadioHelp@radiomail.net".

All fax messages are charged on a per-page basis. The cover-sheet is sent free of charge. All messages are subject to a one-page minimum charge. Domestic faxes are billed at the rate of 99 cents per page. The rate for international faxes depends on the destination country: $0.99, $1.99, $3.99 or $4.99 per page.

RadioMail stands out because the service doesn't require that you have access to a telephone line—it can work using a wireless modem. To become a RadioMail subscriber, users need a wireless modem and the special RadioMail software. According to the company, "RadioMail supports DOS computers, Macintosh computers, and HP Palmtops, in addition to providing one-way communications on the Newton. The RadioMail software is built in to devices that will be available this summer, including the Envoy from Motorola."

Copyright © 1994 by Kevin Savetz. All rights reserved.

AUTOEXEC COMPUTER SALES SERVICE UPGRADES TRAINING

90 DAYS SAME AS CASH OR 0% INTEREST FINANCING

HOT! 486-40MHZ

$1099 COMPLETE SYSTEM INCLUDES 14" SVGA MONITOR

128K CACHE/ 4MB RAM/ 210MB HD/ 3.5" FD/ 101 KYBD

1MB VGA CARD/ MINI-TWR W/230W PS/ MOUSE & PAD

MS DOS 6.2 & WIN 3.1/ 1 YR PTS & LABOR WARRANTY

LEASING ALSO AVAILABLE

FRIENDLY "PLAIN TALK" COMPUTER & BUSINESS SYSTEMS SPECIALISTS

PAGER SERVICE $6.00 PER MONTH

Your Pager or Ours - 1 yr minimum

Lowest Prices
Top Quality Parts & Service
On-Site Service Center

OPEN MON-FRI 9-6

(510) 537-8793 / FAX 537-5757

20654-B Redwood Road, Castro Valley, CA 94546 (World Savings Plaza, CV Blvd & Redwood Rd)

DISCOUNT PRICES ON... CUSTOM COMPUTER SYSTEMS / CELLULAR PHONES & PAGERS / FAX MACHINES

HAVE QUESTIONS...CALL THE TECHNICAL EXPERTS

We specialize in vertical markets. Call us for the right solution for your needs.

BUSINESS INTEGRATION • INTERACTIVE • DATA RECOVERY

Tektronix IBM COMPAQ QMS NEC SCO THE SANTA CRUZ OPERATION NOVELL HEWLETT PACKARD ALR TOSHIBA

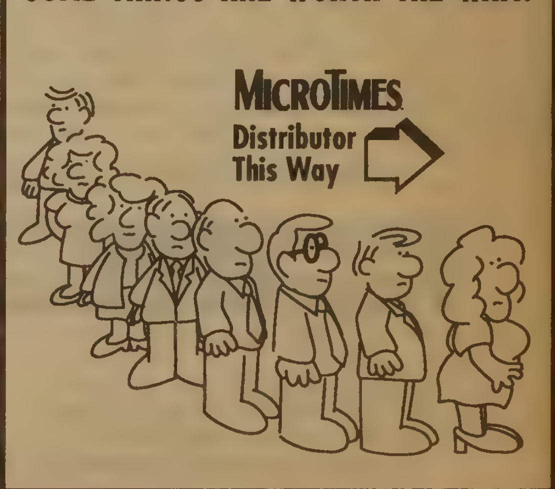
GIGABYTES

Trust Us, We're Different

Quality Service & Upgrades • On-Site & In-Shop Service

(510) 440-8032 FAX (510) 440-9099

SOME THINGS ARE WORTH THE WAIT.



Powerful 486 Notebooks . . . . . .

Texas Instruments TravelMate 4000E Computer

TI TravelMate 4000e Color

486DX2/50, 4MB RAM EXP. TO 20MB
VGA 640X480, TFT Active Color
1.44 Floppy Drive, 200MB HD, DOS6,
Quick Port Mouse, Windows 3.1

$BEST

486DX2/50, 4MB RAM EXP. TO 20MB
VGA 640X480, 9.5" Dual Scan Color
1.44 Floppy Drive, 200MB HD, DOS6,
Quick Port Mouse, Windows 3.1

$BEST

486SX25, 4MB RAM EXP. TO 20MB
VGA 640X480, Dual Scan Color
1.44 Floppy Drive, 120MB HD, DOS6,
Quick Port Mouse, Windows 3.1

$1759 Free Fax/Modem

TI TravelMate 4000e Color
Win DX4 75MHz

486DX4/75, 4MB RAM EXP. TO 20MB
VGA 640X480, 9.5" Active TFT Color
ext.800X600, 1024x768(256 color), non-interlaced , 1280x1024(16 color)
1.44 Floppy Drive, 455 MB HD,
Quick Port Mouse,DOS 6, Windows 3.1

$BEST

486DX4/75, 4MB RAM EXP. TO 20MB
VGA 640X480, 8.5" Active TFT Color
ext.800X600, 1024x768(256 color), non-interlaced , 1280x1024(16 color)
1.44 Floppy Drive, 345 MB HD,
Quick Port Mouse,DOS 6, Windows 3.1

$BEST

TOSHIBA T1910

- Intel 486-33SX SL Enhanced
- 4MB RAM 120/200MB Hard Disk
- Mono/TFT Color

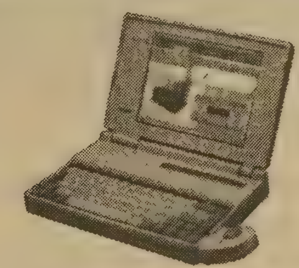
$BEST

Toshiba T1950/T1960

~~PCMCIA 170MB HD $150.00 with purchase T1950/1960~~

$BEST:
- Intel 486DX2-40 /486DX2-50
- 4MB RAM 200/320MB HD
- Dual Scan/TFT Color

TOSHIBA T4700/4800



- T4700/T4800 Dual Scan/TFT color
- Intel Dx2-50Mhz/DX4-75Mhz
- 8MB RAM, 520MB Hard Disk

$BEST

TOSHIBA T3400

- Intel 486-33SX SL Enhanced
- 4MB RAM 120MB Hard Disk
- Mono/TFT Color

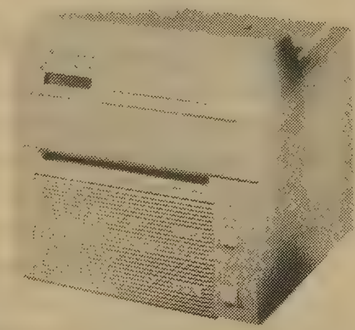
$BEST

TravelMate 4000e MONO

- 486SX25/DX2/50, 4MB RAM Exp. 20MB
- VGA 640X480, ext. 1024x768
- 1.44 Floppy Drive, 120/200MB HD,
- Quick Port Mouse,DOS6, Windows 3.1

$1599 SX25 **$2195** DX2/50

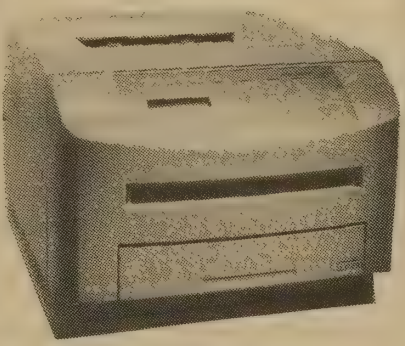
TI MicroLaser Pro 600



- 8PPM, 6MB RAM , 600DPI,
- Adobe Postscript 2 & PCL5
- Parallel and Appletalk

PS23 $1205after rebate

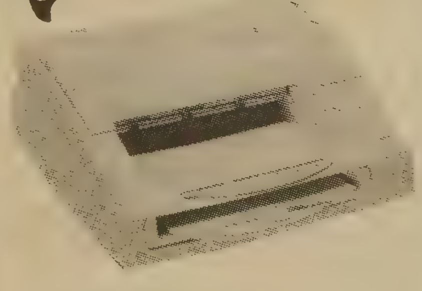
TI MicroWriter



- 5PPM, 2MB RAM, 300DPI,
- Adobe Postscript & PCL4,
- Parallel and Appletalk

$689 PS23 **$999** PS65

MicroMarc Color

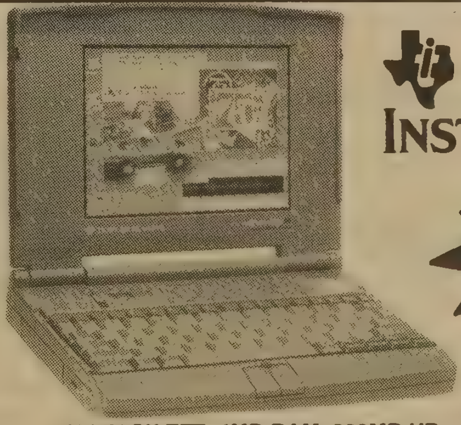


- Color Inkjet Printer
- Hold 120-sheet
- PCL3 Emulation
- 400pcs High-Speed Draft **$399**

TI TM4000M 486 Multimedia-Ready Notebook

- CPU : Intel DX4/75MHz or 486-25SX
- Mono, Advaned color, or Active Color
- 4MB RAM, expandable to 20MB
- 120MB hard drive up plus 1.44MB FD
- PCMCIA-1 Type III slot or 2 type II
- 16-bit sound card, Audio in/out
- EPP/ECP Parallel, 16550 Serial
- 3-5 Hours NiMH battery
- The Point internal pointing device
- Fast SCSI II interface built-in
- Ext. Support: 1024x768(256color)non-
- interlaced. 1280x1024(16 color)
- Multimedia ---- ready

Optional :
Portable CD-ROM Docking System
for use with TravelMate 4000M Serial

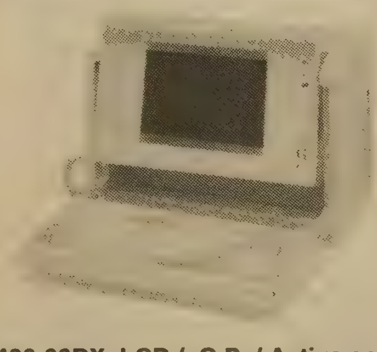


TEXAS INSTRUMENTS

NEW

486-25SX TFT 4MB RAM 200MB HD	$BEST
486-50SX Dual Scan 4MB RAM 200MB HD	$BEST
486-50SX TFT 4MB RAM 340MB HD	$BEST
486DX4/75MHZ TFT 4MB RAM 340MB HD	$BEST
CD ROM DOCKING STATION	$BEST

Portable Computer



80486-33DX, LCD / G.P. / Active color
1MB RAM EXP. TO 32MB, 340MB HD
1.2 OR 1.44MB FD, CRT AND KB PORT
Also available in 486-33/50/66DX or SLC

LCD	Gas Plasma	Active Color
$1359	$1559	$3459

McTek Systems, Inc.
1521 San Pablo Ave. Berkeley, Ca 94702
Tel:(510)525-5129

HOURS
M - F 10:00 - 6:30
SAT 11:00 - 4:00

VISA / MASTER ACCEPTED
VISA MasterCard
ALL PRICES SUBJECT TO CHANGE

FINANCE, LEASING,
UPGRADE, REPAIR,
AVAILABLE

blessing and a curse. "There are no set established residual rates like there are for reuse into film and video. That makes it difficult for the developer, because they can't budget, necessarily. But it makes it fantastic, on the other hand, because we can go in and negotiate these deals, and really come up with something. We don't have to go by this scaled rate.

"There are so many different ways to do this. If the people that you're dealing with, the parties that you're trying to obtain permission from, feel that you're dealing with them straight, that you're upfront and you're discussing these things and educating them about multimedia, it's rare that someone will say, 'No, forget it, I'm out of here.' Because they're not going to make any money, no one's going to make any money, if it's not reused."

Sometimes the issue isn't money at all. "It's just like anything else; it's trying to figure out what that individual's concerned about and what's valuable to them. Easing their concerns honestly by going back to the developer and saying, 'Can you make this so that there's a lock on it, or some way that it's not going to be downloaded, or that his head is not going to be manipulated—these are what he's concerned about. Can we address these concerns? If so, let's put it in writing and let's deal with this, because that's all he's concerned about.'"

She cautions that this is not an appropriate venue for Amateur Hour. "For a film and video clip, not only are you dealing with the copyright holder, which may or may not be the studio, you're dealing with the writer or writers; the director or directors; the talent that appears recognizable within the clip; stunt performers; any underlying music, which may involve the music publisher, the musicians' union, and the record company. That's for a specific clip.

"In baseball or football or any sports footage, people don't realize that the numbers of the teams are considered recognizable, even if you can't see the faces. You need to not only clear the NFL, the logos of the teams, but also the stadium trademark, the announcer's voice, coaches, football players—all these different issues.

"Now people think, 'Forget this, this is just too involved.' But if you have a week to two weeks' time, if the developer is willing to start early thinking about these things, I can offer some alternatives that may be more cost-efficient. Maybe some editing strategies—we don't have to have that whole crowd scene where you can see five celebrities clearly visible, and you don't necessarily need them from your creative perspective.

"But I have cleared clips in five work days, which is a short period of time, because I know who the people are and I can get hold of them. Cost-wise, the earlier you start, the more cost-effective on average it's going to be, because you've got that flexibility. But if we've got only tomorrow and that's it, we don't have that flexibility."

She's seen a few nightmare scenarios.

"A lot of times developers don't think about stunt performers or stunt coordinators. They think Arnold Schwarzenegger jumped in that car. I've had developers who were really ready to go to market and distribute their product come to me and say, 'Can you just take a look at this to make sure we're okay?' And I went through it and said, 'You're okay on this, but you never cleared this stunt performer or the stunt coordinator.' It turned out that they'd had to reshoot that stunt; the first part was one individual, and then they reshot the second part of the stunt in the United States with a different stunt performer. And trying to find out who these stunt performers were when it was an older film and the stunt coordinator had passed away...

"It's a tricky thing, and if I didn't identify it properly and we couldn't figure out who that was, I couldn't advise them to go ahead and do it."

And then there's the fact that the copyright holder in the US may not be the copyright holder elsewhere.

"I've had developers call me and say, 'We didn't go through you guys but we cleared this stuff, and now we're having trouble with people calling and telling us they're going to put an injunction against our product, because we were showing this in Europe and we didn't know that there was a different person that owned the rights to the song in Europe. We cleared the United States and we thought we were okay...'

"Naiveté is not going to cover you. Acting in good faith is not going to cover you. You've spent all this money trying to get this product out there, and now you can't distribute it? Or worse, you end up in arbitration?" (Total Clearance, 415/389-1531)■

---

continued from page 291

VR is set up so that you can move, or walk through, by using the arrow keys, or freely with the mouse. But when you move the mouse, it goes in that counterintuitive way (see above) of Cyberscope's configuration; and it's too tiringly spooky to do for very long, and you can get lost out of the space really fast. I'm not sure how to solve that problem, other than using a joystick that will allow you to configure it with negative x/y values. Still, this is something very promising for low-cost desktop VR and 3-D modeling and display.

CLIMBING MT. DIABLO

It is hardly a world standard, but there are already more products being created in the Superscope-compatible format. "VR Connection," a promotional newsletter that you can get by calling Simsalabim, lists programs such as: VistaPro; Lepton VR Toolkit; Sudden Depth from Chasm Graphics; Superscope Runtime System from Dimension International; CyberVision from Model Vision, which gives support for INTERGRAPH's Microstation CAD system; SGI Developer's Toolkit from NSCEE; 3D Workshop from Pacific Motion; WorldToolKit for Windows from Sense8; Qd3d/3Dpane/SmartPlane from Vivistar Consulting; and VR Development System from VREAM.

P.O.V. Mt. Diablo from Studio Software is an interactive documentary that will be available on a Mac CD-ROM by fall. Boot up and photographer-naturalist Stephen Joseph will take you on a virtual hike around the mountain with over three hundred panoramic shots and 3-D stereographic photos, thirty minutes of digitized video, and original music. A nice self-looping demo of P.O.V. Mt. Diablo is included in the Cyberscope package. The scenic photographs have the layered look of the classic View-Master slides.

WALKTHROUGHS AND FLYBYS CD

If you have access to a 386 PC machine with CD-ROM and Sound Blaster compatibility, one of the best tickets to ride for 3-D fun is *Walkthroughs and Flybys*, a book/CD package ($32.95) by Phil Shatz from Waite Group Press. This is a visual feast of what the amateur as well as the mid-range-and-up professional can do with off-the-shelf graphics software programs, many of them relatively inexpensive. There are demos made with 3D Studio, Fractint, Vistapro, POV-Ray, Deluxe Paint, and Domark's Virtual Reality Studio. The CD-ROM includes a thirty-minute 3-D graphics tour with the Sound Blaster and Sound FX, an introduction to producing your own demos on the PC, and over 300MB of Autodesk 3-D graphics in the FLI format.

The largest, and a very dynamic group of game demos, animated 3-D pieces and flybys were created by some students in Finland who put their programs through all of their paces and obviously had a good time doing it. And you will too. ■

Copyright © 1994 by Tony Reveaux. All rights reserved.

RESOURCES:

Studio Softwa
2140 E. 7th
Place, A2S
Los Angeles,
90021
(213)614-112

Simsalabim
Systems, Inc
P.O. Box 444
Berkeley, CA
94707
1-800-3D-TOD

Waite Group
Press
200 Tamal Pla
Corte Madera,
94925
(415)924-257

Virtus
Corporation
P.O. Box 515
Cary, NC 2751
9962
1-800-897-79

SPECIAL SALE!
486/33/256K
VL BUS w/4MB RAM
$449

ComTek Computer

EVERY DAY LOW PRICES!

MULTIMEDIA 486DX 33/66 w/256K VESA Local Bus

- Intel 486DX 33/66 w/256K Cache
- 4MB RAM; IDE VL BUS; 250MB Hard Disk; SVGA VL BUS w/1MB
- SVGA .28 NI Monitor; 1.2 & 1.44 Floppies; Mini Tower Case
- 101 Keyboard; 2S, 1P, 1G; Mouse; Mini Tower Case
- Dual Speed CD-ROM; Sound Card; Pair of Speakers

Special

DX33 $1379
DX66 $1439

PENTIUM 60/66MHz VESA Local Bus

- 8MB RAM • 540MB Hard Drive • 5 1/4" & 3 1/2" Floppies • 15" Flat NI Monitor • Genoa VL Bus w/1MB SVGA Card • IDE VL Bus • 2S, 1P, 1G Ports • Mid Tower case • 101 Keyboard

$2069/2099

Multimedia Kits

Multimedia Power Kit IIIA

Sound Blaster 16 bit MCD, Free Speakers, Microphone Panasonic CD • 563 (Doublespeed, Multi-session) 7 CD titles: MPC Encyclopedia, King's Quest 5, Mixed Up Mother Goose, Tempera Photo CD, US Atlas, World Atlas, Loom

$360

Multimedia Power Kit IIIB

Sound Blaster 16 bit MCD, Free Speakers, Microphone Mitsumi FX-001D (Doublespeed, Multi-session) 6 CD titles: MPC Encyclopedia, Return to the Zork, Chessmaster 3000, Mavis Beacon's Typing, US Atlas, World Atlas

$350

COMPUTER SYSTEM	IDE HARD DRIVE 250MB	IDE HARD DRIVE 340MB
486DX66/256K	$1109	$1139
486DX50/256K	1139	1159
486DX40/256K	1069	1189
486DX33/256K	1049	1069
486DLC33/128K	919	959
386DX40/128K	889	929

SYSTEM CONFIGURATION

- 4MB RAM
- 1.44 TEAC
- 1.2 TEAC
- Minitower
- 200 w/PS
- 101 Keyboard
- IDE 2FD,2HD
- SVGA .28 Monitor
- SVGA w/1MB
- 2S, 1P, 1G

VESA LOCAL BUS

486/33/256K

$1099

- 4MB RAM
- 250MB Hard Drive
- SVGA Monitor .28dp NI
- VL Bus Video w/1MB
- 1.2 & 1.44 TEAC Floppy Drive
- VL Bus IDE Controller
- 2S, 1P, 1G
- Mini Tower Case
- 101-KeyKeyboard

486SX33	$989
486CX40	$1089
486DX50	$1129
486DX266	$1139

MOTHERBOARDS

486DX2/66/256K VL Bus	$333
486DX/50/256K VL Bus	359
486DX2/50/256K VL Bus	349
486DX/40/256K VL Bus	309
486DX/33/256K VL Bus	289
486DX4	CALL
486DX PCI	CALL

MONITORS

SVGA (1024x768) .28	$220
SVGA (1024x768) .28 Non-Int	240
SVGA Viewsonic 4E	270
SVGA Viewsonic 6E Non-Int	285
SVGA Viewsonic 15 Non-Int	455
SVGA Viewsonic 17 Non-Int	1079
MAG 15F/17F	525/1079
NEC 3FG/4FG	649/749
SVGA 15/17" Impression	327/694

- 100% Financing with 90 Day Free Interest
- Accept Visa and Mastercard
- Price Subject to Change without Notice
- Dealer Inquiries Welcome
- Not Responsible for Typographical Errors
- Prices based on Cash Prices

VIDEOCARDS

Trident 1MB	$63
Genoa VL Bus w/1MB	105
Cirrus Logic VL Bus w/1MB	99
Trident VL Bus w/1MB	75
Orchid Fahrenheit VL Bus w/1MB	149
Diamond Viper VLB w/2MB	389
ATI Pro VL Bus w/2MB	349
Orchid Celsius VL Bus w/2MB	319
Orchid P9000 VL Bus w/2MB	345
AIR P9000 VL Bus w/2MB	385

CASES

Mini Tower	$47
Medium Tower	75
Baby AT	65
Full Tower	99

MODEMS & FAXES

Zol 2400 Baud	$39
Zol 96/24 Modem & Fax w/Win	55
Zoltrix 14.4 Modem & Fax	89

HARD DRIVES

CONNER		
CP30204	210MB IDE	$189
CP30254	250MB IDE	209
CP30334	340MB IDE	229
CP30420	420MB IDE	249
CP3544	540MB IDE	CALL
CP3540	540MB SCSI	CALL
CP1370	1.3GB SCSI	CALL
MAXTOR		
7213A	210MB IDE	$199
7245A	245MB IDE	219
7345A	345MB IDE	239
MXT540A	540MB IDE Fast	CALL
MXT540S	540MB SCSI Fast	CALL
WESTERN DIGITAL		
WD	213MB IDE	189
WD	255MB IDE	209
WD	340MB IDE	229
WD	420MB IDE	249

KEYBOARDS

Chicony	$17
Keytronic USA	33
Maxi Switch	33
Omnikey 102/Ultra	89/99
Focus w/Cal	35

CONTROLLERS

IDE w/IO	$18
IDE VL Bus	30
SCSI-2 VL Bus (AIR)	235
SCSI VL Bus (Bustek) 545S	CALL
SCSI VL Bus (Ultrastor) 34F	CALL

MULTIMEDIA & CD-ROM

Sound Blaster	89
Sound Blaster Pro	95
Sound Blaster 16ASP	209
Toshiba CD Rom 3401	335
Panasonic CD Rom	195

MOUSES

Microsoft Compatible	$13
Microsoft Serial	49
Microsoft Bus	69
Logitech MouseMan	59

SIMMS & MATH

1MB SIMM	$35
4MB SIMM	155
512KBx36 SIMM (72 pins)	CALL
1MBx36 SIMM (72 Pins)	160
4MBx36 SIMM (72 Pins)	635
Other	CALL

CALL FOR OTHER ITEMS NOT LISTED

VISA MasterCard

DUBLIN

6602 Dublin Blvd.
Dublin, CA 94568
(510) 803-1530

SAN BRUNO

1778 El Camino Real
San Bruno, CA 94066
(Between Millbrae & San Bruno Ave.)
(415) 225-0153

SANTA CLARA

5029 Stevens Creek Blvd.
Santa Clara, CA 95051
(408) 249-4297

SPEED
IS WHAT YOU NEED!

MICRONICS COMPUTERS INC.
ORCHID

MICRONICS VLB/256K/ZIF
ORCHID Kelvin 64 VLB 2MB
INTEL 486DX2-66MHz CPU

14" SVGA 1024 NI	8MB 72Pin Memory
Med Tower Case	420MB 12ms IDE HD
101 Enhance KB	3.5" Floppy Drive
1 Bi-Dir Printer Port	VLB IDE Controller

2 Hi-Speed 16550 Serial Ports
Logitech MouseMan & Pad

$1499

Upgrade, Repair & Installation of
Small Business Network's
Our Specialty

Blow out Sale

386DX-40MHz w/128K w/CPU	$85
486DX VLB 33/50/66/P24MHz w/256K	$85
486DX VLB All CPU Speed w/256K (Used Both 30 or 72 Pin Memory)	$85
IBM BLUE LIGHTNING 75MHz W/256K	$295
Sound Blaster 16 Basic	$99
Sound Blaster Pro	$79
Panasonic Double Speed CD ROM	$135
40 Watt Speaker	$20
80 Watt Speaker	$70
SIIG 14.4/14.4 S/R Fax/Data Modem	$75
SIIG 2 16550 Serial, 1 Bi-Dir. Parallel Ports	$39
— Networking —	
Novell Personal NetWare Starter Kit	$159
Novell Personal NetWare Expansion Kit	$89
INTEL EtherExpress 16 TP or BNC	$109
3COM 3C509 16-Bit TP or BNC	$119
SIIG 16-Bit Combo NIC	$39
SIIG Packet Combo NIC for Laptop	$109
Call us for BNC or TP Cables	$Call

— Call us to help your Network solutions! —

NetUSA Computer Co.
844 Folsom St. Suite #202 SF, CA 94107
(Between 4Th St. & 5Th St.)
(415) 543-0108
FAX: (415) 543-0109
Mon-Friday 9AM-6PM Sat-Sun 10AM-5PM

Continued from page 174

DMorph can "turn your child into a dinosaur, or your jalopy into a sports car." It provides a well-designed, two-picture editing environment for creating warping and morphing special effects. Its grid/mesh-based method of image transformation is very intuitive, you just click on the border to make lines appear and then click and drag at their intersection point to move them where you want them to end up. It also has the ability to do keyframing, or cel animation, and alpha channel editing for use in compositing. The book is particularly useful here, complementing the potentially difficult software concepts with concise definitions and illustrations.

DTA, Dave's Targa Animator, is a program utility that lets you string together the output still images created in DMorph to make an animation in the flic format that plays back on the Trilobyte Player. An important feature that separates this from many other morphing packages is its ability to break down flic sequences into single frames in different file formats. A layer command allows you to composite pictures or flics on top of backgrounds. You can also create the kind of 3-D images that you look at with the red and blue 3-D glasses!

There is a lot of power in this package. It's clear that it has been tested and refined over time. Because DTA is DOS-based and involves entering command line syntax, it is not as easy to use as some of the Windows programs, but the book is written so that even a DOS neophyte can walk through the tutorials and examples and learn to use the program pretty easily. *Morphing on Your PC* offers well-thought-out solutions for many morphing and warping problems not available in some of the more expensive packages and is an excellent bargain at $29.95. (The Waite Group Press. 1-800-368-9369)

Amiga Hardware Reviews

Retina BLT Z3

Distributed By: Noahji's
Manufactured By: MicroSystem
List Price: 4MB $899; 1MB $699, w/V-Code $949; upgrade from Z2 $399; 2.2 software $24.50
Reviewed By: Douglas J. Nakakihara

This is the newest version of the Retina 24-bit graphics card and it only works in Zorro III Amigas like the 3000 and 4000. The 32-bit Zorro III bus makes it faster than the original Retina and it also has its own blitter chip. In addition to the standard 15-pin VGA connector, the board has Y/C and composite outputs, but they require an optional video encoder (V-Code, $69). The board ships with 1MB or 4MB of RAM. The latter amount will allow you to play double-buffered flicker-free animations.

The largest noninterlaced 24-bit resolution it offers is 800 x 600. Eight-bit displays can be bigger, like 1280 x 1024 noninterlaced. Interlaced screens can reach 2400 x 1200! Of course, it also depends on your monitor's capability.

Z3 lacks an Amiga video pass-through, so for those few programs that must be run on a normal Amiga screen, you'll have to use an external switchbox or two monitors. A software-controlled switch is in the works.

Retina ships with several utility programs including a 24-bit paint program, an ADPRo saver, and a couple animation-related programs. Some really cool things can be done like show 24-bit animations in a window on Workbench with audio. The German-translated manual is a little rough, but since Noahji's has taken over distribution of MicroSystem products (including VLab and Toccata), tech support has been significantly improved. (Noahji's, 3591 Nyland Way, Lafayette, CO 80026. 303/499-1975)

Toccata

Distributed By: Noahji's
Manufactured By: MicroSystem
List Price: $499
Reviewed By: Douglas J. Nakakihara

Toccata is a new 16-bit stereo sound board for the Amiga manufactured by MicroSystem in Germany. It features direct-to-hard-disk recording and playback. The board has three stereo line and one stereo mic inputs, and one stereo out-

It's Time to upgrade your Computer Systems
to the fastest machine at a very affordable Prices !!!

Best Buy Pentium P5-90MHz

- ✔ **SuperServer P5VL-PCI 586-90Mhz**
- ✔ 256KB 15ns Cache MotherBoard
- ✔ **16 MB of RAM 70ns (72 Pin SIMM)**
- ✔ **Adaptec 2940 PCI SCSI-II Controller**
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **Quantum 540 MB SCSI-II Hard Disk**
- ✔ **Orchid Kevin PCI 64 w/ 1MB DRAM**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ Full Tower Case w/ 250 Watt P.S.
- ✔ Microsoft Mouse Ergonomic 2 Button

$2,580

Best Buy Pentium P5-66MHz

- ✔ **Server P5 Pentium 586-66Mhz PCI**
- ✔ 256KB 15ns Cache MotherBoard
- ✔ **8 MB of RAM 70ns (72 Pin SIMM)**
- ✔ IDE PCI 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **IDE 540 MB Hard Disk**
- ✔ **Orchid Kevin PCI 64 w/ 1MB DRAM**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ Middle Tower Case w/ 230 Watt P.S.
- ✔ Microsoft Mouse Ergonomic 2 Button

$1,840

Rocket Intel Pentium 60MHz

- ✔ **CAD System 586-60Mhz VLB**
- ✔ 256KB 15ns Cache MotherBoard
- ✔ **8 MB of RAM 70ns (72 Pin SIMM)**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **IDE 420MB Hard Disk**
- ✔ **2X Double Speed CD ROM Drive**
- ✔ **Kevin 64 VLB w/ 1MB DRAM**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ MiddleTower Case w/ 230 Watt P.S.
- ✔ Microsoft Mouse Ergonomic 2 Button

$1,690

Best Buy 486DX2-66MHz PCI

- ✔ **HOT System 486DX2-66Mhz PCI**
- ✔ 256KB Cache MotherBoard
- ✔ **8 MB of RAM 70ns (72 Pin SIMM)**
- ✔ IDE PCI 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **IDE 340 MB Hard Disk**
- ✔ **Discover CD 16 + Sound Card + 8 CDs**
- ✔ **Orchid Kevin 64 PCI w/ 1MB DRAM**
- ✔ Keytronic 101 Enhanced Keyboard
- ✔ Middle Tower Case w/ 230 Watt P.S.
- ✔ Microsoft Mouse Ergonomic 2 Button

$1,760

AIR Green PC 486DX-33Mhz

- ✔ **AIR SH Green PC 486DX-33Mhz**
- ✔ 256KB Cache MotherBoard
- ✔ **4 MB of RAM 70ns**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **IDE 345 MB Hard Disk**
- ✔ Middle Tower case + 230 Watt P.S.
- ✔ **Orchid Kevin 64 VLB w/ 1MB DRAM**
- ✔ 101 Enhanced Keyboard
- ✔ Microsoft Compatible Mouse

4DX-33 $1,015
4DX2-66 $1,060

HOME INTEL 486DX-33Mhz

- ✔ **Dash Intel 486DX-33Mhz VLB**
- ✔ 256KB Cache MotherBoard
- ✔ **4 MB of RAM 70ns**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **IDE 345MB Hard Disk**
- ✔ **Cirrus Logic VLB 1MB**
- ✔ 101 Enhanced Keyboard
- ✔ Mini Tower Case w/ 230 Watt P.S.
- ✔ Microsoft Compatible Mouse

4DX-33 $925
4DX2-66 $970

AMD 486DX-40MHz

- ✔ **AMD 486DX-40MHZ SYSTEM**
- ✔ W/ 256KB Cache + MB + CPU
- ✔ **4 MB of RAM 70ns**
- ✔ IDE VLB 2HD/2FD w/ 2S/1P/1G Port
- ✔ TEAC 1.2 & 1.44 MB Floppy Drive
- ✔ **IDE 280 MB Hard Disk**
- ✔ **Windows Accelerater SVGA 1MB Card**
- ✔ Hires Mouse + 101 Enhanced Keyboard
- ✔ **Sound Blaster + Double CDROM + 8 CD SW**

$1,120

CYRIX 486DX-33 MHz

- ✔ **Cyrix 486DX-33Mhz**
- ✔ W/ 256KB Cache MB + CPU
- ✔ **4 MB of RAM 70ns**
- ✔ IDE VLB W/ I/O
- ✔ TEAC 1.2 &1.44 Floppy Drive
- ✔ **280 MB IDE Hard Disk**
- ✔ **Cirrus Logic VLB w/ 1MB**
- ✔ Mini Tower Case + 230 W P.S.
- ✔ Hires Mouse + 101 Enhanced Keyboard

$750

BAYCOMPUTER, INC.

Store Hours: Mon - Fri: 9:00AM - 6:00PM • Sat: 10:00AM - 5:00PM

HARD DISKS	
171 MB IDE Maxtor 7171AT	$165
213 MB IDE Conner 16ms	$175
254 MB IDE Conner CP30254 w/ 32K	$210
245 MB IDE Maxtor 7245AT	$215
280 MB IDE IBM	$215
340 MB IDE Maxtor 7345AT	$220
340 MB IDE Quantum LPS-340AT	$220
520 MB IDE HD Quatum LPS-540AT	$318
540 MB IDE Maxtor MXT-540A	$318
540 MB SCSI HD Quatum LPS-540S	$365
540 MB SCSI Maxtor MXT-540SL	$385
1.0GB MB SCSI HD Quatum (9ms)	$645

CD ROM / SOUND CARDS	
Sony CD 33A W/ interface card	$138
Toshiba XM-3401B SCSI 200ms	$285
Panasonic Double Speed CP-562	$138
NEC Tripple Speed 3XI SCSI 195ms	$450
ProAudio Spectrum 16 / Studio 16	$95/115
Sound Blaster 16 / SB 16 ASP SCSI	$135/195

VESA LOCAL BUS MOTHERBOARDS	
BAY 486DX-33 Cyrix CPU + 256 Kcache	$265
PC54VL-PCI P5-90MHz w/ 256Kcache	$400
ASUS 486DX4-100MHz MotherBoard	$130
MICRONICS 586 EISA + PCI + 60MHZ	$1765
AIR 486 SH VLB w/ 256K 33/66Mhz	$110
INTEL P5 Premier PCI 90MHZ	$440
BAY 486 VLB ISA w/256K 33/50Mhz	$110

PRINTERS	
Panasonic KX-1150/2023	$140/200
Deskjet 1200C/Postcript	$1430/2195
Deskjet 520/500C/560C	$290/395/570
HP Laserjet 4+/4M+/4L/4ML	$1410/1915/659/985

FLOPPY DRIVE/TAPE BACKUP	
TEAC 1.2MB 5.25	$48
TEAC 1.44MB 3.5/ WFrame	$38/42
TEAC Dual Floppy Drive 1.2 & 1.44MB	$115
Summit Tape Backup 250MB	$170
Colorado Tape Backup 250MB	$165
Archive 250MB Tape Backup Floppy Con.	$160

NETWORK CARD / SOFTWARES	
3COM	
3C503-16 Etherlink II 16 bit coax/TP	$ CALL
3C509-16 Etherlink III 16 bit coax/TP	$ CALL
COMPULAN	
NE 600E 16 bit TP	$ CALL
NE 200E 16 bit Coax	$ CALL
NOVELL CARDS	
NE2000 16 bit Coax	$ CALL
NE2000 16 bit TP	$ CALL
NOVELL SOFTWARE	
Netware 3.12 for 5/10/20 Users	$595/1290/1895
Netware 4.01 for 5/10/20 Users	$820/1820/2630

SCANNERS	
ScanJet IICX Color w/ Kit	$985
ArtiScan Scanner 600/800/1200	$815/915/1185

SOFTWARES	
Personal Netware Software	$85
Microsoft DOS 6.2	$40
Microsoft Windows 3.1	$45
CD ROM Softwares	$Call

MONITORS	
SuperVGA (1024x768) Generic Tube	$200
SuperVGA (1024x768,0.28) Hitachi Tube	$220
SuperVGA (1024X768, Non-int)Hitachi T.	$240
NEC 3V15" Flat Screen	$469
NEC 4FGe 15" Flat Screen	$625
NEC 5FGe 17" Flat Screen	$965
NEC 5FGp 17" Flat Screen	$1130
NEC 6FGp 21" Flat Screen	$1995
Viewsonic 6E 14" 0.28 DP	$275
Viewsonic 15EX 15" 0.28	$385
Viewsonic 17 17" 0.28DP	$890
Viewsonic 20 20" 0.28DP	$1480
Viewsonic 21 21" 0.26DP	$1680
Mag 15F 15" 0.28DP	$395
Mag 17F 17" 0.26DP SVGA Monitor	$669
SONY 1430 14" 1024x768 0.25DP	$555
SONY 15SF 15" Monitor	$480
SONY 17SE 17" 1600X1200 .25DP	$995
SONY 2036 20" 1280x1024 0.30DP	$2195

VIDEO CARD -VLB- VIDEO CARDS	
Mono Card w/ Printer Port	$13
Trident 512k Card/ Trident 1MB card	$45/65
16Bit 1 MB Tseng-4000 72Hz 32K Color	$75
Cirrus Logic VLB 1MB/2MB	$95/135
Trident VLB Plus1MB/2MB	$85/130
Number 9 GXe Level 11 2MB ISA/VLB	$355/360
Number 9 GXe Level 12 3MB ISA/VLB	$435/440
Fahrenheit VLB Bus1MB/2MB	$140/180
Orchid Fahrenheit VLB VA 1MB/2MB	$165/195
Orchid Kevin PCI w/ 1MB/2MB	$165/195
Diamond Speedstar Pro 1MB	$110
Diamond Stealth 24 VLB 1MB	$145
Diamond Stealth Pro VLB 1MB/2MB	$255/315
Diamond Viper VLB 2MB Weitek Chipset	$345
Diamond Viper PCI 2MB	$345
ATI Graphic Turbo VLB/PCI 2MB/4MB	$460/645
ATI Ultra Pro VLB 2MB	$345
ATI Ultra Pro PC1 2MBRam	$345

FAX/ MODEM	
Zoltrix 2400 Internal Modem	$30
Zoltrix 9600/2400 Fax/Modem	$50
Zoltrix 14.4K V.32 bis, V.42 bis I/E	$110/135
US Robotics Sportster 14.4K I/E	$110/135
US Robotics Courier HST Dual Standard	$Call
Intel SatisfaxtionModerm/400e I/E	$385/400
Intel Fax/Moderm 14.4K I/E	$165/195

MISCELLANEOUS	
IDE Multi/IO Caching Controler To 64MB	$105
Promise DC-2000 VLB IDE& I/O	$40
Dash VLB IDE & I/O Suport 2.88FDFast	$40
Orchid VLB IDE & I/O Suport 2.88FDFast	$60
DTC 2270VL VLB IDE & I/O Fast	$75
Promise DC-4030VL IDE VLB CACHE	$135
Adaptec 1522B/1522B Kit SCSI	$85/140
Adaptec 1542C/1542C Kit SCSI	$175/240
Adaptec 2940 PCI SCSI-2 w/ Kit	$265
Adaptec 2842 VLB Fast SCSI-2 Kit	$245
Q-Logic PCI w/ SCSI-3 Con.	$290
AIR 32Bit VLB Ethemet Adaptor	$250
Ethemet NE2000 16 Bit Adaptor	$55
AIR 32BIT VLB SCSI-2 w/o I/O	$260
Trantor T130 SCSI Interface w. Kit	$50
ULtrastor 24F EISA SCSI	$365
ULtrastor 34F VLB SCSI	$265
BusLogic BT445S VLB SCSI-II	$260
BusLogic BT545K BusMaster SCSI	$235

MasterCard

VISA

1252 So. Abel Street, • Milpitas, CA 95035
Tel: (408) 956-8014 • Fax: (408) 956-8013

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE

YOUR NO.#1 CHOICE
COMPUX USA

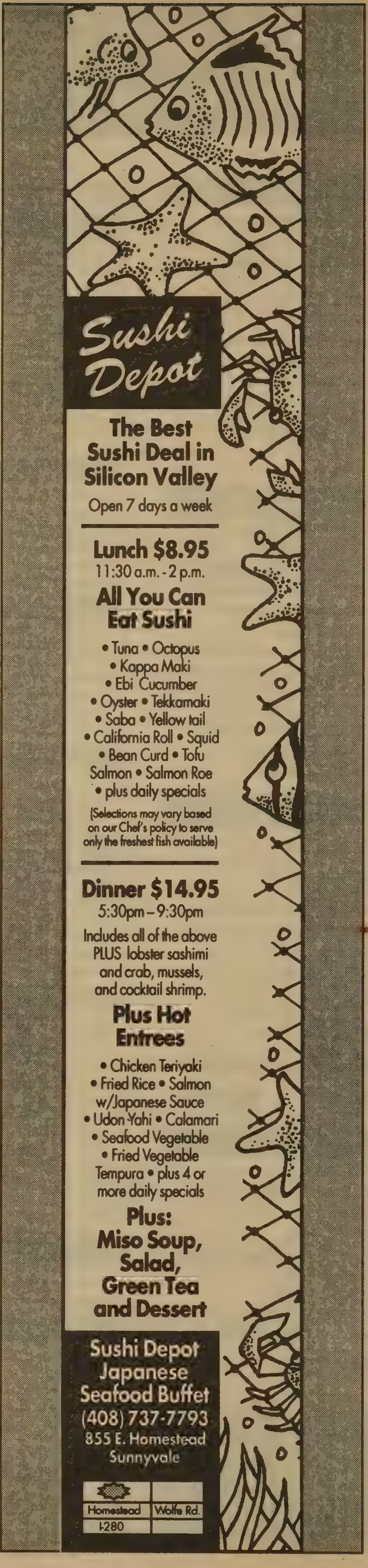
We Offer You:

1. 2 Years Parts & Lifetime Labor Warranty
2. 30 Days Money Back Guarantee Only upon IBM Incompatiability Reasons on complete Systems
3. 72 Hours Burn-in,Customized Systems
4. Lifetime Technical Support,Quick Replacement
6. Local Free Delivery Within 50 Miles for Systems
7. Prices Reflect Cash Discounts,Subject to Chnage

SYSTEM SALE	M/B&CPU	BASIC SYSTEM	BASIC SYSTEM w/TOTAL 4MB RAM,SVGA CARD 14"SVGA 0.28dp MONITOR,1.2MB FDD,MOUSE/PAD				
			200MB HDD	250MB HDD	340MB HDD	420MB HDD	540MB HDD
PENTIUM /P5-66/60 256C PCI	820/700	968/848	1510/1390	1530/1410	1550/1430	1570/1450	1648/1527
486DX4-100/256C VLB	655	787	1330	1350	1370	1390	1468
486DX2-66/256C VLB	297	430	965	985	1005	1025	1097
486DX2-50/256C VLB	238	380	940	960	980	1000	1075
486DX-40/256C VLB	234	355	909	929	949	969	1049
486DX-33/256C VLB	197	342	895	915	935	955	1028
486SX-33/256C VLB	157	288	854	874	894	914	989
IBM 486BL-75/256C VLB	303	455	995	1015	1035	1055	1128
IBM 486SLC2-66/256C VLB	198	340	886	906	926	946	1028
486DLC-40/128C VLB	143	290	841	861	881	901	980
386DX-40/128C ISA	86	218	780	800	820	840	925
386SX-40 ISA	56	210	751	771	791	812	885

BASIC SYSTEM: M/B&CPU,1MB RAM,IDE+2S/1P/1G,1.44MBFDD,MINITOWER CASE/P.S.,101-KEY KEYBOARD

COMPUX USA,INC.
3517 RYDER ST.,SANTA CLARA CA 95051
(408)·524-8899 1-800-4-COMPUX
INDUSTRIAL STANDARD SPECS
EVERYDAY LOW PRICE
SPECIAL BUILD-TO-ORDER
PERSONALIZED SERVICE
PROMPT DELIVERY



Sushi Depot

The Best Sushi Deal in Silicon Valley
Open 7 days a week

Lunch $8.95
11:30 a.m. - 2 p.m.

All You Can Eat Sushi
• Tuna • Octopus
• Kappa Maki
• Ebi Cucumber
• Oyster • Tekkamaki
• Saba • Yellow tail
• California Roll • Squid
• Bean Curd • Tofu
Salmon • Salmon Roe
• plus daily specials
(Selections may vary based on our Chef's policy to serve only the freshest fish available)

Dinner $14.95
5:30pm – 9:30pm
Includes all of the above PLUS lobster sashimi and crab, mussels, and cocktail shrimp.

Plus Hot Entrees
• Chicken Teriyaki
• Fried Rice • Salmon w/Japanese Sauce
• Udon-Yahi • Calamari
• Seafood Vegetable
• Fried Vegetable Tempura • plus 4 or more daily specials

Plus: Miso Soup, Salad, Green Tea and Dessert

Sushi Depot
Japanese Seafood Buffet
(408) 737-7793
855 E. Homestead
Sunnyvale

put. Quarter-inch stereo-to-RCA adapter cables are included. Audio can be sampled all the way up to CD (44.1kHz) and DAT (48kHz) rates.

The Toccata software is modular in design and opens many windows. The interface gadgets, like volume and input level, work in real time as do the level meters. The only problem I had was that the small player utility would not work from the Workbench, only from the CLI. The compression options were impressive and cut file sizes in half, with little noticeable difference in sound quality.

A full-featured 16-bit sample editor called Samplitude MS by SEK'D is packaged with Toccata. This provides a means to fine-tune samples. It features fades, echo, and other things I couldn't begin to cover here. It works nicely with Toccata stereo samples. The Playlist, for example, is a neat feature that allows you to program different parts of a sample to play in a certain order.

A hardware/software add-on for SMPTE timecode support is available according to the manual. Reportedly, Toccata works with MediaPoint, and Scala compatibility is in the works. ARexx is supported. By itself, Toccata is an expensive toy, but controlled through ARexx or by MediaPoint or Scala, it becomes a powerful tool. (Noahji's, 3591 Nyland Way, Lafayette, CO 80026. 303/499-1975)

Amiga Software Review

LightWave Organic Modeling

Published By: Motion Blur Publishing
Author: David Duberman
List Price: $19.95
Reviewed By: Douglas J. Nakakihara

The first volume of the LightWave Power Tutorial Series is now available. The initial installment covers "organic modeling," which involves creating a frame using spline curves and then letting LightWave automatically "patch" a skin over the frame. This modeling technique provides a powerful way to create complex real-life objects that would be difficult—if not impossible—to build

NAC Knows NETWORKS!

Authorized Dealer

HEWLETT PACKARD
Authorized Dealer

DAVID SYSTEM

COMPAQ

WOLLONGONG

Microsoft

FTP

digital™

NOVELL

IBM Business Partner

intel

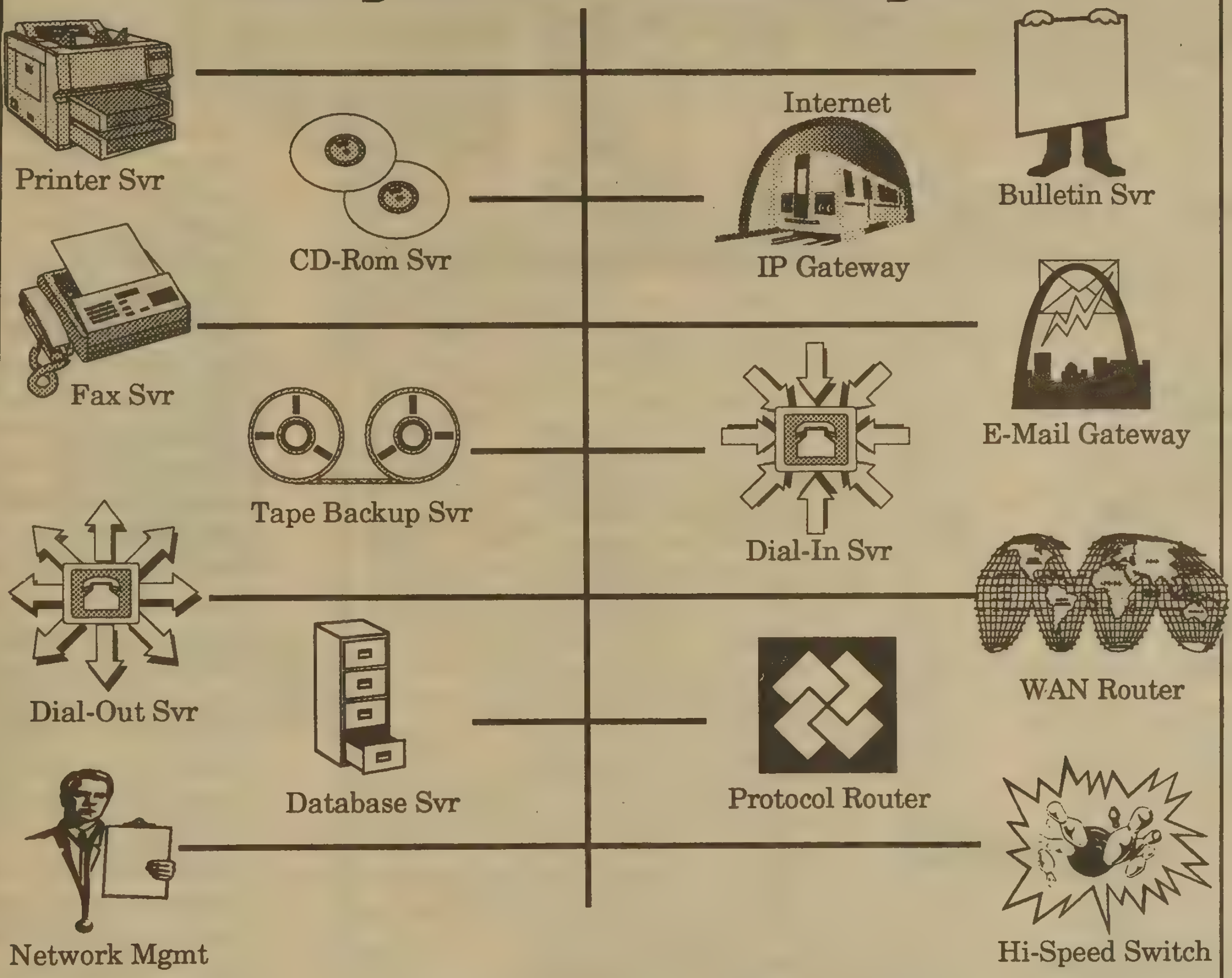
3Com

LANtastic™
ARTISOFT INC.

SCO
THE SANTA CRUZ OPERATION

Hummingbird

Does your *NET* work for you?


Printer Svr
CD-Rom Svr
Internet
IP Gateway
Bulletin Svr
Fax Svr
Tape Backup Svr
Dial-In Svr
E-Mail Gateway
Dial-Out Svr
Database Svr
Protocol Router
WAN Router
Network Mgmt
Hi-Speed Switch

Novell Gold Authorized Reseller

Novell Authorized Service Center

Novell Unix Master

Novell Net Master

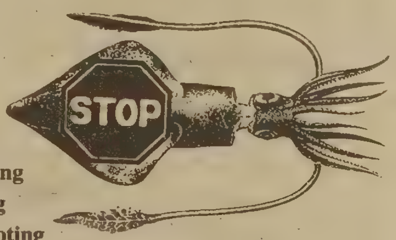
Summer *Free* Spiff

Order	you get
$25,000	Novell NSEpro ..... $1499 value ..... 1 Year Subscription of CD's from Novell for all the latest tech support and product information
$15,000	3-Hour Admin Training ..... $400 value ..... NetWare, UNIX, or interoperability system administration tutorial
$5,000	Proxima PowerTouch ..... $129 value ..... Surge protection power center

Ends on 8/31/94 Inital Order Only**

YOU NEED STRONG HANDS
....Not finger pointing

- **Enterprise Network Design**
- **Cabling System Design**
- **System Administration**
- **System Management**
- **Equipment Installation**
- **Application Installation**
- **Cable Installation**
- **System Administration Training**
- **Application Software Training**
- **Network System Trouble-Shooting**
- **On-Site Hardware Trouble-Shooting**
- **Telephone Support**
- **Maintenance Contract**
- **Carry-In Hardware Repair**



NAC Engineering & Service Department is composed of veterans in UNIX, Windows, Macintosh, WAN, and a group of CNEs.

HOT *Server* Feast

COMPAQ Prosignia VS Server

- 486/66, 16M RAM
- Compaq Fast SCSI2 ctlr w/ 1G HD
- Compaq Netflex 32-bit Ethernet card

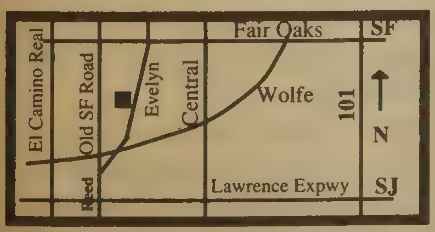
Server Feast Special: **$4,125**

digital™ XL Server 590

- 90MHz Pentium, 16M RAM
- DEC PCI Fast SCSI2 ctlr w/ 1G HD
- SCSI dual-speed CD-ROM
- DEC Etherwork Turbo Ethernet card

Server Feast Special: **$5,495**

Free NOS loading!!!
!!When NOS is ordered with server!!


Fair Oaks
SF
El Camino Real
Old SF Road
Evelyn
Central
Wolfe
101
N
Reed
Lawrence Expwy
SJ

*N*etwork *A*ssociates *C*orporation
(408) 733-2600 ext 333

FAX (408) 733-4268
720 E. Evelyn Ave., Sunnyvale, CA 94086-6526

Not responsible for typographic errors. Subject to stock on hand. Prices subject to change.

Best Memory Prices • Higher Quality • We Buy Memory/Trade/Excess Inventory •

SIMM'S

1x9-10 9 Chip	$39
1x9-80 3/9 Chip	36/42
1x9-70 3/9 Chip	37/40
1x9-60 3/9 Chip	38/41
1x8-80 8/2 Chip	37/36
1x8-80/2 Chip	37/39
4MBx36-70	540
4MBx36-60	550
16MBx9-70	550
4x9-70	135
4x9-80	130
4x8-70 8 Chip	122
4x8-80 8 Chip	118
256x9-80	10
256x9-70	11

DRAM'S

1x1-80	$4.99
1x1-70	4.99
1x1-60	4.99
256x4-80	4.99
256x4-70	4.99
256x4-60	4.99
256x1-15-12-10	1.55/1.60/1.75
256x1-70/80	2.50
4464-80	3.50
4464-10	3.00

CPU CHIPS

INTEL	
80386DX-16/20/25/33	$29/29/39/59
80486DX2-50/66	239/259
80486DX-25/33/50	199/259/390
80486SX-33/25	89/69
586 PENTIUM 66/60	CALL
AMD	
80486DX-40 MHz	$169
80486-2-50 MHz	205
80486-2-66 MHz	229

SPECIAL MATH CO-PINTEL

80387DX-20 /25Tube	$30

MATH CO-PROCESSOR

INTEL	
80487SX (For all Speed)	$200
80487SX-20 Overdrive)	299
80486SX-25 (Overdrive)	299
80486SX-33 (Overdrive)	399
80486DX-25 (Overdrive)	299
80486DX-33 (Overdrive)	399
8087-5 MHz	39
8087-2 8 MHz	49
8087-1 10 MHz	69
80287-6 6 MHz	35
80287-8 8 MHz	39
80287XL 12 MHz (Laptop)	69
80287-10 10 MHz	35
80C287-12 MHz	35
80387SX-16,20,25	69
80387DX-16,20,25,33	75
80387DX-25 (Tube)	39
WEITEK	
3167-20 20 MHz (Tube)	$29
3167-25 25 MHz	79
3167-33 33 MHz	115
4167-25 MHz	175
4167-33 MHz	300
CYRIX	
83D87-40 40 MHz	$29
83D87-20 20 MHz	29
83D87-25 25 MHz	29
83D87-33 33 MHz	29
83SX87-25 16 MHz	29
83SX87-33 MHz	29
IIT	
8C87-8	$29
80C287-10	29
80C387SX-25	29
80C387SX-33	29
8C387DX-20	29
8C387DX-25	29
8C387DX-33	29
8C387DX-40	29
ULSI	
US 83C87 16/20 MHz SX	$29
US 83C87 20/25 MHz SX	29
US 83C87 25/33 MHz DX	29
US 83C87 40 MHz DX	29

EPROMS

2764-200ns	$5.00
27C64-200ns	5.00
27128-200ns	6.00
27128-150ns	6.00
27256-200ns	6.00
27C256-200ns	6.00
27C512-200ns	6.50
27C020-150ns	10
27C010-150ns	10
27C040-150ns	13.99
514402-80 (1x4) STT, ZIPP	28
514400-80 (1x4) ZIPP	19
514400-80 (1x4) DIPP	35
514400-70 (1x4) SOJ	11
514400-70 (4x1) SOJ	16

COMPAQ MEMORY

DeskPro 386/20e, 20, 35e, 25 286e	
1 MB Module	$175
4 MB Module	165
DeskPro 386/20e, 25e	
1-9 MB Exp Brd	140
4-12 MB Exp Brd	239
DeskPro 386s-16	
1 MB Module	89
4 MB Module	179
1-9 MB Exp Brd	159
4-12 MB Exp Brd	240
DeskPro 286N, 386N, 386SX/20	
2 MB Module	75
4 MB Module	175
DeskPro 386N, 386SX/20	
2 MB Module	118
DeskPro 286N, 386N	
0-4 MB Exp Board	175
DeskPro 386/33SL, 486/25, 486/33L System Pro	
2 MB Module	139
8 MB Module	239
32 MB Module	1700
DeskPro 386/16	
1 MB Kit	89
1 MB Exp Brd	229
2 MB Exp Brd	329
4 MB Kit.	CALL
4 MB Exp Brd	425
8 MB Exp Brd	725
Portable 386	
1 MB Kit.	125
4 MB Exp Brd	310
4 MB Exp Brd	322
Portable LTE (8086)	
512K Module	CALL
Portable LTE/286	
1 MB Module	125
2 MB Module	189
4 MB Module	425
Portable SLT/286	
1 MB Module	169
4 MB Module	349
Portable SLT/386	
1 MB Module	CALL
2 MB Module	129
4 MB Module	225
Portable III	
512K Kit	55
2 MB Kit.	125

IBM PS/2 MEMORY

Mdl 30/386, Exp Brd	
512K kit	$54
2 MB Kit	99
Mdl 70-061; -121; 55SX; 65SX: Exp Brd	
1 MB Module	69
Mdls 70-061: E61: 121: 50Z, 55LS, 55SX: 65SX: P70:	
2 MB Module	99
Mdls 70-A21: A61, B21, B61	
2 MB Module	99
Mdls 55SX: 65SX: 55LS, 65LS	
4 MB Module	159
Mdls 80-111; 121, 311, 321	
2 MB Card	99
Mdls 80-A21; A31	
4 MB Card	215
Mdls 80-A21: A31	
4 MB Card	215
Mdls 90; 95	
2 MB Module	159
4 MB Module	259
Mdls 50 & 60	
2-8 MB Exp Brd	275
Mdls 70 & 80	
2-8 MB Exp Brd	325
2-14 MB Exp Brd	450
4-16 MB Exp Brd	475
Adapter	
2 MB Module	CALL
PS/1 Home System	
512K Upgrade	CALL
2 MB Upgrade	CALL

TOSHIBA PORTABLE MEMORY

T1200XE	2 MB Card	$125
T1600	2 MB Card	125
T3100SX	2 MB Card	125
	4 MB Card	199
T3100e	512K Card	CALL
	2 MB Card	125
T3200SX	2 MB Card	125
	4 MB Card	199
T3200	3 MB Card	175
T1000SE; XE	1 MB Card	119
T5100	2 MB Card	129
T5200: 8500	2 MB Card	125

STATIC ZIPPS

1x4 70ns DIPP TC514400AP	$35
256x16-70/80 Zipp for HP/Packard Bell	29
Video Zipps D42274V-08/07 TC524256Z	9.00

CACHE MEMORY

32x8-25	$6.95	8x8-20	$3.75
32x8-20	5.25	8x8-25	2.25
32x8-15	7.95	8x8-15	3.99
32x8-12	CALL	16x4-25	2.25
64x4-25	6.00	16x4-20	3.75
64x4-20	7.00	16x4-15	4.50
64x4-15	10.00	128x8-25	32.50
64x1-20	6.75	128x8-20	CALL
64x1-15	8.50	128x8-15	CALL

72 Pin SIMMS

2 MB 604-80ns	$79
4MB 1x36-80ns	145
4MB 1x36-70ns	149
8MB 2x36-80ns	269
8MB 2x36-70ns	295
16MB 4x36-70ns	545
16MB 4x32-70	495

COMPAQ MEMORY

Model	P/N	
LTE 286		
1 MB	117081-011	$89
2 MB	117081-002	125
4 MB	117081-003	219
SLT 286		
1/4 MB	110237-001	99/259
LTE 386S/20		
2 MB	12125-001	129
4 MB	121125-002	225
Contura Lite 20/25		
2 MB	129769-001	125
4 MB	129769-002	245
8 MB	129769-003	395
Portable 386		
1 MB	107651-001	125
4 MB	107653-001	310
Portable III		
2 MB	10-7332-001	125
EBD	167811-001	225
SLT 386		
2 MB	118304-001	135
4 MB	118305-001	225
Deskpro 386S (E. Board)		
4 MB	11364-001	255
4 MB	112534-001	189
Deskpro 386/33L, 486/33L, 50/25		
2 MB	115144-001	105
8 MB	116561-001	365
32 MB	116568-001	1475
6 Socket E Board		CALL
Deskpro 386/20e, 25e (E. Board)		
4 MB	113645-001	249
Deskpro 386/20,20e,25e		
4 MB	113132-001	199
Deskpro 286N, 386N, 386SX/20, 386/25M, 486/33M, 486S/25M, 486S/16M		
2 MB	118689-001	189
4 MB	118690-001	345
8 MB	128877-001	315
Deskpro 486/33L, 486/50L, 386/33L		CALL
Prolinea 3/255 & 3/252S		
2 MB	141738-001	135
8 MB	141742-001	315
Prolinea 4/33		
2 MB	141682-001	125
4 MB	141684-001	189
8 MB	141685-001	345
Other Models		CALL

IBM PS/2 & PS/1 MEMORY

PS/1 286/386SX	2/4 MB	$135/225
PS/1 Consultant Essential/Expert	1/2/4/8 MB	79/99/189/320
386 Valuepoint	2/4/8 MB	99/179/325
486 Valuepoint	4/16 MB	189/595
PS/2 30-286	2 MB	99
50Z, 55SX, 65SX, 70	2/4 MB	99/179
40SX, 35SX,35SL	2/4 MB	99/179
70A21, A61, 121	2 MB	135
80-11, 121, 311	4 MB	245
95,90,P75, PS/1 Pro	2/4/8 MB	135/129/335
16 Bit Exp Bd For 50, 50Z, 60, 65SX	0K	179
32 Bit Exp Board for all 70 & 80 models	0K	189
RISC 6000	16/32/64 MB	745/1490/2890

LASER PRINTER MEMORY

Price includes Memory, Board & Installation Instructions

IBM LASER	
4019/4019E 1/2/3.5 MB	$89/139/189
4029 (All Model) 4 MB	189
EPSON LASER	
6000-2/4MB	$157/243
7000-2/3 MB	145/189
Action LaserII -2/3/4/5 MB	125/149/200/289
HP LASER	
HPII/IID 2/4 MB Board	$125/220
HP 4/4M 4/8MB	179/369
HP IIP,IIP+,III,IIID, IIIP 1/2/3/4	89/135/159/220
IIsi 4/8 MB	179/299
DeskJet 500/500c 550C 256K	89
Design Jet Plotter 4 MB	155
PANASONIC LASER	
KXP4410/KXP4430 1/2/3/4 MB	$100/150/175/225
KXP4420/4450/4451 1/2/3/4 MB	98/145/159/225
KXP4450 1 MB	119
KXP4455 2 MB	139
OKI LASER	
OL400 1/2 MB Board	$99/129
OL800/820 2/4 MB Board	129/189
OL810 2/3/4 MB Board	150/184/224
QMS LASER	
PS 410 2/3/4 MB	$119/165/189
PS 860, 1700 1/4/8 MB	53/133/166
PS 815, 825, 815MR, 2/4/6	168/232/295
SHARP LASER	
9500PS 1 MB	$55
JX-9500/9700 1/1.5/2.5/4	105/135/188/344
OTHERS	
Apple Laserwriter II/IINT/IINTX 4 MB	$149
Brother HL-4 2/3/4 MB	119/165/189
Brother HL-8E V 1/2 MB	99/139
Compaq Pagemarq 15 & 20 1/4/8	49/139/266
Fujitsu RX7100/7200 1/2 MB	185/245
Kyocera F800, F800Am F800T 2/4	95/137
NEC Silentwriter 90/290	99/124
NEC Silentwriter 95 2 MB	104

AST MEMORY

Bravo 3/33(LC) 325S	2/8 MB	$120/325
Bravo 486/25 & 4/33	2/8 MB	135/345
Bravo 486LC	4/8/16 MB	189/325/595
Cupid-32 Board 0K		239
Premium 386C	4 MB	189
Premium SE 450	4 MB	189
Premium 386/25, SX,33,486/25	1 MB	99
Premium II 386, 486	1/4 MB	99/189
Executive Notebook	4 MB	189
Other Models		CALL

SUN MEMORY

SPARC SLC	4 MB	$189
3/60, 80, 4/40, 60, 65	4/16 MB	189/795
SPARC 1 &1+, 1Pc	4/16 MB	189/795
SPARC 10	16/64 MB	625/CALL
SUN Classic	16 MB	625
SPARC Server 630np	64 MB	2285
SUN IPX, ELC	4/16 MB	189/775
SPARC II	16 MB	795
Other Models		CALL

C.B.
Memory & Computers
1319 Jacklin Rd. • Milpitas, CA 95035
(Jacklin Exit Off 680)
Tel: (408) 946-5174 or 946-5175
Fax: (408) 946-5376
Prices Subject To Change w/o Notice.

using object primitives. This includes things like animals and plants.

The author, David Duberman, provides insightful step-by-step instructions on creating several objects. The pace of the tutorials is good and you never feel like too much is being dumped on you at any one time. Furthermore, Duberman manages to successfully walk the fine line between sufficient instruction and overexplanation. Hints, shortcuts, and pitfalls are meaningfully explained throughout the 94-page book. I was surprised to find just how easy it was to learn this powerful technique.

Minimal previous knowledge of LightWave is required, but an absolute beginner may have problems with certain points. I am probably a little better than a novice at modeling and there were only a few places where I had problems following the tutorials. More annotated screen shots would have been helpful though.

This book will give you the tools to create intricate objects and keep them from looking like a collection of boxes and spheres. LightWave Organic Modeling would be a great starting point for anyone learning this complex piece of software. I can't wait for the next volume! (Motion Blur Publishing, 915A Stambaugh St., Redwood City, CA 94063. 415/364-2009) ■

ERRATUM: Macintosh Software

In the review of MicMac, which appeared last issue, I stated: "at 3:1 compression, which is adequate for most transcription purposes, a two-hour interview takes about 90K" of disk space.

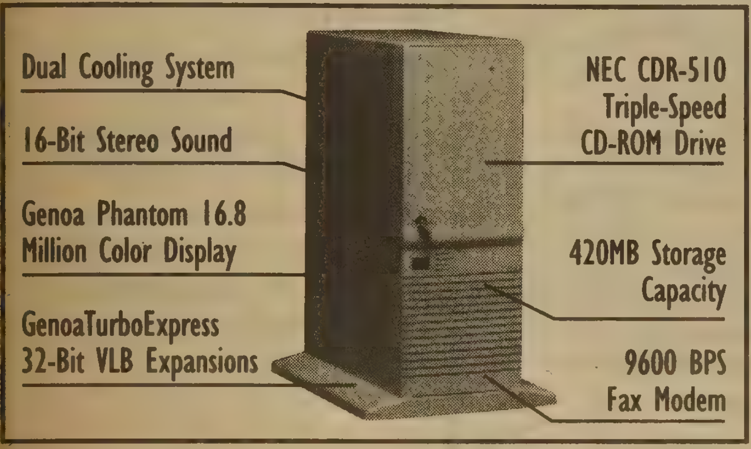
MicMac is a fine and useful product. However, as reader Tim May correctly pointed out, I was off by a few orders of magnitude. The reality is that the interview in question requires about 90MB of space, so you need a fairly large disk in order to make full use of this product.

Apologies to MicMac author Leo Baschy and any readers who have been inconvenienced by this latest iteration of editorial brain death.

For further information about MicMac, contact Nirvana Research, 1-800-525-3888; nirvana@cup.portal.com.

—Mary Eisenhart

ROCK YOUR DESKTOP!


Dual Cooling System
16-Bit Stereo Sound
Genoa Phantom 16.8 Million Color Display
GenoaTurboExpress 32-Bit VLB Expansions
NEC CDR-510 Triple-Speed CD-ROM Drive
420MB Storage Capacity
9600 BPS Fax Modem

GENOA TURBOBAHN

Intel 80486DX2-66MHz
Genoa TurboExpress VL Motherboard
8k Internal Cache/Built in Math-Co.
256k FAST 15ns Write Back Cache
4MB *Ultra Fast* 60ns RAM
1.2MB & 1.44MB Floppy Drive
420MB IDE Hard Drive - 12ms
Genoa 32Bit Video Card - 1MB
Cirrus Logic 5428 Graphics Engine
SiS 32Bit VLB IDE Controller w/IO
Mid-Tower Case w/Security Door
ViewSonic 6E Monitor .28NI
101 Enhanced Keyboard
Microsoft Mouse v2.0
9600bps FaxModem w/Software

SPECIAL: $1397

OUR CONFIDENCE IN OUR QUALITY...

Please call for Configuration Changes and Prices.

All Packages feature...

- *Green System PowerDown Feature*
- *Green Monitor PowerDown Feature*
- *Industry Leading 2 Year Parts Warranty*
- *Lifetime Labor Warranty*
- *Free Tech-Support Access*
- *24Hr. Support BBS Access*

DSi... The Quality Goes In Before the Name Goes On...

MULTIMEDIABLITZ 466

Intel 80486DX2-66MHz Processor
Genoa TurboExpress VL Motherboard
8k Internal Cache/Built in Math-Co.
256k FAST 15ns Write Back Cache
8MB *Ultra-Fast* 60ns RAM
1.2MB & 1.44MB Floppy Drive
540MB IDE Hard Drive - 12ms
Genoa Phantom 32i VLB Video Card
Tseng Lab W32i Graphics Engine - 2MB
SiS 32Bit VLB IDE Controller w/IO
Mid-Tower Case w/Security Door
ViewSonic 15EX Monitor
Focus 8000 Keyboard w/Calculator
Microsoft Mouse v2.0 (Egronomic)
9600bps FaxModem w/Software
Sound Blaster 16 SCSI-2
NEC 3X Triple Speed CD-ROM
14 Great CD-ROM Titles

SPECIAL: $2599

INDUSTRY LEADING WARRANTY!

2 YEAR PARTS & LIFETIME LABOR!

GENOA MEDIASTATION EX

Intel 80486DX2-66MHz Processor
Genoa TurboExpress VL Motherboard
8k Internal Cache/Built in Math-Co.
256k FAST 15ns Write Back Cache
4MB *Ultra-Fast* 60ns RAM
1.2MB & 1.44MB Floppy Drive
420MB IDE Hard Drive - 12ms
Genoa 32Bit Video Card - 1MB
Cirrus Logic 5428 Graphics Engine
SiS 32Bit VLB IDE Controller w/IO
Mid-Tower Case w/Security Door
ViewSonic 6E Monitor .28NI
Double Speed CD-ROM 250ms
Sound Blaster 16 MultiCD
9600bps FaxModem w/Software
101 Enhanced Keyboard
Microsoft Mouse v2.0
50W Power Speaker System
14 Great CD-ROM Titles

SPECIAL: $1897

POWER GRAPHICS P590i

Intel Pentium 90MHz Processor
SuperMicro 586 PCI/VLB Motherboard
16k Internal Cache/Dual Pipeline
512k FAST 64Bit Cache Memory
32MB 72 Pin RAM - 64Bit Access
1.2MB & 1.44MB Combo Drive
540MB IDE Hard Drive - 10ms
Matrox MGA Ultima+ PCI 2MB to 4MB
MGA Power Graphics Accelerator
PCI Bus IDE Controller w/IO
Full-Tower Case w/Security Door
ViewSonic 15EX Monitor (15" Flat)
Focus 8000 Keyboard w/Calculator
Microsoft Mouse v2.0
9600bps FaxModem w/Software

SPECIAL: $3995

Symbol of Quality!

SOLID WARRANTY
FREE UPGRADE PLAN
24 HR. TURN AROUND
FRIENDLY SERVICE

72 HR. BURN-IN
QUALITY
CONTROL

DSi Technologies

1415 Jackson Street, San Francisco, CA 94109
TEL: 415/922-4366
Fax: 415/922-7225

*Prices subject to change *Not responsible for typographical errors *All trademarks acknowledged *15% restocking fee on all returns *$20.00 charge on each returned check *Prices Reflect Cash Discount

Lifetime Labor & 1 Year Parts Warranty On All Computers

Introducing The Fastest 90MHz Green Pentium System In The World!

SUPER 90MHz GREEN PENTIUM

- The First Green Pentium System In The World
- INTEL Pentium CPU w/ZIF Socket
- Made in USA
- AMI Flash BIOS
- 4 PCI Bus Master Slots
- 2 Buffer-Enhanced VESA Bus-Master VLB Slots
- 8MB High Speed 72-pin RAM
- TEAC 1.44 Floppy Drive
- Quantum 270MB 12ms Hard Drive
- VLB IDE w/2S/1P/1G
- ATI Ultra Pro PCI w/1MB SVGA
- 15" 1024x768 SVGA Monitor .28dp
- Deluxe Medium Tower
- Mitsumi 101 Enhanced Keyboard

We Can Beat Any Price With The Highest Quality

$1999

Green Power Supply Option

486DX2-66 256K VESA LOCAL BUS

- VESA 32 Bit VLB Motherboard w/ZIF
- Pentium OverDrive Ready
- AMD 80486DX2-66MHz CPU
- AMI BIOS
- Internal Clock/Battery
- 4MB RAM 70ns
- 1.44 Floppy Drive
- QUANTUM 270MB 12ms Hard Drive
- VESA VLB Super IDE w/2S/1P/1G
- Genoa Turbo VLB w/1MB
- NEC 14" Low Radiation SVGA Non-Interlaced Monitor 0.28dp
- Mitsumi 101 Enhanced Keyboard
- Deluxe Desktop Case
- 200 Watt Power Supply

$1159

486DX-40 64K VESA LOCAL BUS

- VESA 32 Bit VLB Motherboard w/ZIF
- Pentium OverDrive Ready
- AMD 80486DX-40MHz CPU
- AMI BIOS
- Internal Clock/Battery
- 4MB RAM 70ns
- 1.44 Floppy Drive
- W.D. 212MB, 13ms Hard Drive
- 32 bit VLB Super IDE Controller
- 32 bit Cirrus Logic VLB SVGA w/1MB
- 14" SVGA Monitor 1024x768 .28dp
- 2 Serial, 1 Parallel, 1 Game Port
- Mitsumi 101 Enhanced Keyboard
- Deluxe Desktop Case
- 200 Watt Power Supply

SPECIAL PROMOTION

$899

END USER ONLY
NO RESELLERS
LIMIT 1 PER CUSTOMER

486SX-33 64K VESA LOCAL BUS

- Intel 80486SX-33MHz CPU
- AMI BIOS
- Internal Clock/Battery
- 4MB RAM 70ns
- 1.44 Floppy Drive
- IDE 2FD/2HD Controller
- 2 Serial, 1 Parallel, 1 Game Port
- 170MB Conner 15ms Hard Drive
- Trident SVGA w/512K
- 14" SVGA Monitor 1024x768 0.28 dp
- Mitsumi 101 Enhanced Keyboard
- Deluxe Desktop Case
- 200 Watt P.S.

$799

PC Upgrade Specialists

Networking Software

Netware Lite $69	**Lantasic AI 6.0....$89**
Novell Version 3.12	**Novell Version 4.01**
5/10 User $595/1359	5/10 User CD-ROM......$795/1555
25/50 User $1925/2699	25/50 User CD-ROM..$2195/2725

Networking Products

***Novell 2 Station Starter Kit** $169*

***Lantastic 2 Station Starter Kit** $269*

Including:

- ⊃ 2 Copies of Novell Lite or LANtastic
- ⊃ 2 NE 2000 16 bit Ethernet Adaptors
- ⊃ 2 50 Ohm Cable Terminators
- ⊃ 1-25 foot cable
- ⊃ **Novell Additional Users..................$89**
- ⊃ **Lantastic Additional Users 139**

SUPER SALE ***Ethernet Cards***

16 bit NE2000	$43
16 bit NE2000 Twist Pair	43
8 Ports Concentrator	229
16 Ports Concentrator	439

VIDEO GRAPHIC CARD

Paradise SVGA w/1MB Hi-Color	$69
Genoa 8500 VLB w/1MB	98
Diamond Speed Star Pro VLB w/1MB	108
Diamond Stealth 24 VLB w/1MB	138
Diamond Stealth 32 PCI w/1MB	168
Diamond Viper VLB/PCI 2MB VRAM	305
Orchid Fahrenheit 1280 Plus w/1MB (ISA)	138
Orchid Fahrenheit VLB w/1MB	138
Orchid Kelvin 64 Bit VLB/PCI w/1MB	338
ATI Graphics Ultra Pro VLB/PCI w/2MB VRAM	269
ATI Turbo 64 PCI VLB w/4MB VRAM	529

MONITORS

Sony CPD 17SE 1600x1280 0.25mm dp	$1055
Nanao F340iw 1024x768 0.28mm dp	599
Nanao F550i 17" 1280x1024 0.28mm dp	835
Nanao F550iw 1280x1024 0.28mm dp	935
Nanao F560iw 17" 1280x1024 0.26dp	1175
Nanao F750i 21" 1280 x 1024 0.31mm dp	1399
Nanao F760iw 21" 1280x1024 0.31mm dp	1895
NEC 1431 14" SVGA 0.28dp Low Radiation	299
NEC 3V 15" SVGA 0.28mm dp	458
NEC 4FGE 15" SVGA 0.28mm dp	619
NEC 5FGE 17" SVGA 0.28mm dp	960
MAG DX-15F 15" 1280x1024 .28dp	399
MAG MX15F 15" 1280x1024 Low Radiation	Best Price 464
MAG MX17F 17" 1280x1024 0.26mm dp	799
MAG DX 17F 17" 1280x1024 .26dp	699
Viewsonic 6E 14" Non-Interlaced SVGA 0.28mm dp	268
Viewsonic 15EX" Low-Radiation Non-Interlaced SVGA 0.28mm dp	Best Price 375
Viewsonic 17G 17" Low Radiation Non-Interlaced SVGA 0.28mm dp	768
ADI 4G/LR 15" 1280x1024 Non-Interlaced SVGA 0.28mm dp Low Radiation	368
CTX 14" SVGA Non-Interlaced 0.28 mm dp	245
14" SVGA 0.28 dp	Best Price 209

World Net
MICROSYSTEMS

World-Net Microsystems, Inc.
1503 North Milpitas Blvd.
Milpitas, CA 95035
(408) 263-8088
Fax (408) 263-4588

Terms and Conditions:

1. Lifetime Labor & 1 Year Parts Warranty on all computers.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change without notice.
4. Shipping, insurance and COD charges are extra and nonrefundable.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. Not responsible for typos.
8. All returns subject to 15% restocking fee and cover only World-Net Microsystems brand computers excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.
11. Price reflects cash discount.

Best Price, Best Quality, Best Service!

At World Net We Care!

NEW PLUG AND PLAY MULTIMEDIA SYSTEM 486SX-25/64K

- VESA 32 bit VLB Motherboard w/ZIF
- Pentium Overdrive Ready
- Intel 80486SX-25MHz CPU
- AMI BIOS
- 4MB RAM 70ns
- 1.44 Floppy Drive
- 170MB 15ms Hard Drive
- SVGA w/1MB Hi-Color
- IDE w/2S/1P/1G
- Panasonic CR-562B Double Speed CD-ROM Drive
- Sound Blaster Pro Compatible Sound Card
- Labtec Stereo Speakers
- **Free** 6 CD Title Bundle
  Free MS-DOS 6.2 & Windows 3.11
  Free Microsoft Compatible Mouse
- 14" SVGA Monito 1024x768 0.28 dp
- Mitsumi 101 Enhanced Keyboard
- Deluxe Mini-Tower Case w/230 Watt UL Power Supply

$1199

MONTHLY SPECIAL

AcerView 76i
17" Monitor

- PC World Magazine- Best Buy, April 1994
- 17" CRT 1280x1024 .28 dp
- Edge to Edge Display
- On Screen Digital Control
- Green Power Savings
- Brand New
- One Year Mfg. Warranty

PC WORLD BEST BUY

$609

CD-ROM SPECIALS

PANASONIC CR-562B DOUBLE SPEED
Photo CD Compatible

$129

Toshiba 3401B
SCSI Interface • Double Speed
Photo CD Compatible

$249

CD ROM & SOUND CARD

TOSHIBA XM-3401 200ms	Best Price $249
Panasonic CR562 CD-ROM 320ms/300K	129
Sound Blaster Pro Deluxe	78
Sound Blaster Pro 16 Value	98
Sound Blaster Pro 16 MCD	159
Sound Blaster 16 SCSI-2 w/ASP	199
80 Watt Stereo Speakers	79

CD ROM TITLES

Adventure of Willy Beamish	$12
America Business Phonebook 1994	16
Arthur's Teacher Trouble	18
A Hard Days Night	19
Asia ALIVE	12
Audubon Bird	16
Barney Bear Goes to School	12
Barney Bear Goes to Space	12
Barnon's College Guide	16
Beauty and the Beast	16
Brain Drain	12
Carmen San Diego - Deluxe	18
Chessmaster 4000	16
Compton's Interactive Encyclopedia	38
Cyber Race	18
Dinosaur & Space Adventure	18
3D Dinosaur Adventure	18
Dune	19
Europe ALIVE	12
F-15 Strike Eagle III	16
Family Doctor	16
Fatty Bear/Birthday Surprise	16
Forever Growing Garden	35
Gabriel Knights	19
Gus Goes To Cybertown	16
Iron Hellix	18
Indiana Jones Fates of Atlantis	19
Just Grandma and Me	18
King Quest VI	19
Kodak Photo Access	12
Mad Dog McCree	19
Mantis Experimental Fighter	12
Mayo Clinic Family Health Book	18
Mega Race	19
Microsoft Bookshelf MPC	29
Microsoft Dinosaur	29
Microsoft Encarta 1994	59
Microsoft Works for Windows	29
Mixed Up Mother Goose	12
Monkey Island - English	15
Nat'l Georaphic Mammals	18
PC SIG 12 Shareware	12
Playing w/Languages - English	19
Playing w/Languages - French	19
Playing w/Languages - German	19
Playing w/Languages - Japanese	19
Playing w/Languages - Spanish	19
Putt Putt Goes to the Moon	19
Quantum Gate	19
Return to Lork	19
San Diego Zoo/Animals	12
Seventh Guest - Virgin Games w/2CD	25
Sleeping Beauty	16
Star Wars Chess	18
Story Time	12
STW Grolier's Encyclopedia MPC	25
The Legend of Kyrandia	16
US History	16
Who Killed Sam Rupert	16

5 CD Title Bundle	**$49**
6 CD Title Bundle	**$59**

We Use Only The Finest Components

PRINTERS

HP DeskJet 520	$299
HP DeskJet 560C	595
HP LaserJet 4L	699
HP LaserJet IIIP	949
HP LaserJet 4	1399
Panasonic KX-P 2023	185
Panasonic KX-P 2123	228
Panasonic KX-P 2124	Best Price! 299

ADD-ON CARDS

AT I/O (2S/1P/1G)	$15
AT I/O (2S/1P/1G w/16550 UART)	45
IDE 2FD/2HD w/(2S/1P/1G)	15
DTC VESA Local Bus IDE 2FD/2HD, 2S/1P/1G	69
Adaptec SCSI Adaptor 1542 CFK w/Kit	238
Adaptec SCSI VLB Controller 2842 Bk w/Kit	250
Adaptec SCSI/PCI Controller 2940 w/Kit	309
MicroSoft Serial Mouse	42
MicroSoft Compatible Serial Mouse	14
PS/2 Compatible Serial Mouse	18
Logitech Serial Mouse Man	48
Logitech Bus Mouse Man	65
Logitech Trackman	75

BRAND NEW DRIVES

TEAC 1.44/1.2MB Floppy Drive	$38/48
Colorado Tape Backup 250MB	158
Tape Qic-80 3M DC2 120	18
Western Digital 212MB 13ms IDE	178
Western Digital 420MB 13ms IDE	238
Quantum 270MB 12ms IDE	198
Quantum 525MB IDE	309
Quantum 525MB SCSI	369
Quantum 1.0GB 10ms SCSI	659
2.0GB 9ms SCSI	1059

MODEMS/FAX

Zoltrix 9600/2400 Fax/Modem w/Bit Fax for Windows	$48
14,400 bps Int. Fax/Modem w/software for Windows	118
GVC 14,400 bps Ext. Modem	169
Zyxel 16,800 bps Fax/Modem (external IBM, MAC)	299

KEYBOARDS

101 Enhanced Keyboard	$15
Keytronic (Quiet) Keyboard	38
Fujitsu 101 Keyboard	48
Northgate Omni Key 101/102	78
Northgate OmniKey Ultra	98
Focus 2001/9000	38/58

N
880
680
N Milpitas Blvd.
Dixon Landing
Jacklin
237

Business Hours:
Mon-Fri 9:00-6:00 • Sat 10:30-4:00

World Net
MICROSYSTEMS

World-Net Microsystems, Inc.
1503 North Milpitas Blvd.
Milpitas, CA 95035
(408) 263-8088
Fax (408) 263-4588

California Resellers:

Take advantage of this free editorial listing!

Plan now to make the most of your peak selling season with the 1994 MicroTimes 6th Annual Buyers Guide!

By making sure you're listed in this year-round resource you will:

- Bring customers into your store during your most important selling season and throughout the following year. They'll see your message next to an exciting lineup of editorial features, including our own writers' picks for the best hardware and software products of 1994 and over thirty pages of Buyers Guide announcing new products and special offers—many of which you'll already have in stock, ready to sell!

- Showcase your store, products, and services by telling your potential customers about the unique service your business offers, your in-house experts, and the guidance they provide in such areas as LANs, multimedia, accounting, and other specialties.

- Benefit from our own special promotions of this exciting issue which will appear in October and November. MicroTimes will help you build the consumer excitement you need to ring up sales as you ring in the new year.

Special Vendor Authorized Listings! In addition to listing your store's name and other information alphabetically by geographical area, we also offer an additional feature to enable your prospective customers to find you quickly: **a separate directory of vendor-authorized sales, service, training, and support providers.** So if you're authorized to provide these services for Novell, IBM, Apple, Sun, Hewlett-Packard, or other name-brand products, please give us that information so we can include your name in the vendor-authorized listings.

To make sure you're part of this important resource, complete and sign the attached reseller poll form and mail or fax it back to us by Sept. 30, 1994. **If your store has more than one location, please use a separate form for each location** to generate the sales that will make your fourth quarter a success. Don't let this opportunity pass you by!

FOR ADVERTISING INFORMATION, CALL
(510)934-3700
***or* (213)851-8600.**

MICROTIMES 1994

6th Annual Buyers Guide Reseller Poll

Mail to: Reseller Poll, 3470 Buskirk Ave., Pleasant Hill, CA 94523
Fax: (510)934-7351
Deadline: September 30, 1994

Store Name: ______________________

Store Manager: ______________________

Address: ______________________

City: ______________ **State:** ______ **ZIP:** ______

Phone: ______________ **Fax:** ______________

What does your business specialize in, and who are your in-house experts for each specialty? (e.g., multimedia, hardware, software, components, service)
List up to three:

Specialty	Expert

What software operating systems does your business support?

MS-DOS☐ Windows☐ UNIX (specify variety)__ O S / 2☐ Macintosh☐ Other (specify)___

What is your multimedia specialty?

CD Titles☐ Video☐ Desktop Publishing☐ Production☐ Hardware☐ Software☐ Software Development☐

List the three top-selling brands sold at your store in 1994:

____

What special value-added services (e.g., service, training, support, warranties, return policy, etc.) does your business offer? (Please keep responses under 25 words or we will edit them to fit available space.)

____

____

____

Are you a vendor-authorized sales, service, training, and/or support source?
If so, please list up to five vendors (e.g., Sun, Novell, Hewlett-Packard, Compaq) who have authorized your business to provide these services, and check the areas for which you're authorized.

Vendor	Sales	Service	Training	Support

I certify that all the statements made in this survey are true.

Name: ______________ **Signature:** ______________

Title: ______________ **Date:** ______________

The San Diego
COMPUTER
FAIR September
22-25, 1994

Earthquakes, Aliens, Thailand, Networking, the Internet and Computers

All this and much more will be at The San Diego Computer Fair '94

The San Diego Computer Fair

September 22, 23, 24 & 25,
9 a.m. to 6 p.m.

Computer Marketplace
& Demonstration Hall
San Diego Concourse
Convention & Performing
Arts Center
Third & B Street
Downtown San Diego

Business Computing Center
Holiday Inn at
the Embarcadero
1355 N. Harbor Drive
San Diego

Additional Seminars
Westgate Hotel
1055 Second Avenue
San Diego

Fair Seminar Passport
Advance Four-Day
Registration Including
Seminars: $25

Exhibit Ticket*
One-Day Admission: $7
Free for Children Under 12
*Does Not Include Seminars

For More Information
Call 619-573-0617
or 800-573-3247

Experience these five aspects of The San Diego Computer Fair '94:

The Demonstration Hall

This area features computers at their most entertaining. Enjoy entire sections devoted to multimedia, virtual reality, computer animation, music, voice recognition, genealogy and dozens of others. The Demonstration Hall is a no-selling, hands-on environment created with your entertainment in mind. Visit with representatives from Microsoft, IBM, Logitech, Broderbund, Sierra On-Line, Electronic Arts, Canon, Kodak, Compton's NewMedia, Activision, Atari and scores of others.

The Business Computing Center

Here's where the rubber meets the road. A completely separate facility devoted to the different ways computers are supporting business in today's rapidly changing environment. Encounter professionals involved in networking, the Internet, telecommuting, mobile computing, accounting, desktop publishing, CAD, word processing, legal, and medical computing. This Hall was designed to provide an intimate, hands-on atmosphere, so you're sure to get lots of personal attention and advice.

A few of the industry leaders you can expect to see: Microsoft, WordPerfect, Lotus, Epson, Platinum, IBM, Claris and many more.

The Computer Marketplace

If you've had your share of the hands-on, and are ready to take advantage of some serious buys on software, CD ROMs, hardware and peripherals, head for the Computer Marketplace. You'll find hundreds of booths selling just about anything you'd ever want to buy in computing.

Seminars

Seminars are THE most popular aspect of The San Diego Computer Fair. In fact, we've increased the number of seminars by 300 percent, and still anticipate standing room only in many of the learning suites. Categories include: the Internet, *Windows*, troubleshooting, fuzzy logic, networking, programming, MIDI, animation, and lots of "How To"s. To attend seminars, you must hold a Fair Seminar Passport, with specific reservations for each seminar in order to guarantee a seat. All the information you will need is available by calling and requesting a Seminar Schedule. Seminar Schedules are also available through Egghead Software stores in California, Arizona and New Mexico.

The Computer Learning Center

The Computer Learning Center is actually one big training facility. You can sign up for as many one-on-one sessions as are available with some of San Diego's foremost computer specialists. Lots of personalized attention in the most popular areas of computing.

Plus Computer-Generated Jazz Concert, Festival of Computer Animation, Weird Software Contest, Worst Computer Nightmare Contest, Kids' Corner, Prizes, Computer Bargains, and much, much more.

"Unlike Any Computer Event You've Ever Seen Before"

Whether your office has one computer or one hundred....

We keep you working

AUTHORIZED TECHNICAL SERVICES has the experience *and* the expertise to handle your equipment service needs. Whether you're running one small office with one micro computer, or a statewide network of offices with a complex inventory of computers, video display terminals, printers and data communications devices—you simply cannot afford "down time". Call **ATS** today to find out just how easy it is to stay productive

---

ATS
AUTHORIZED TECHNICAL SERVICES
1-800-451-4057

HERE'S A PARTIAL LIST OF EQUIPMENT WE SERVICE:
MICROCOMPUTERS: Dell, Epson, Advance Logic (ALR), AT&T, Everex, Leading Edge, AST Research, Compaq, IBM. **LOCAL AREA NETWORKS:** 3Com, Novell. **STORAGE DEVICES:** IOmega (Bernoulli). **DOT MATRIX PRINTERS:** Alps, Datasouth Epson, NEC, Panasonic, Citizen, Texas Instruments, C. Itoh, Digital Equipment (DEC), IBM, Okidata, Printek, Toshiba. **PLOTTERS:** Hewlett-Packard, IBM. **THERMAL PRINTERS:** IBM, Texas Instruments, Panasonic. **LINE PRINTERS:** Data Products, Printronix. **LETTER QUALITY PRINTERS:** C. Itoh, Diablo, NEC Spinwriters. **LASER PRINTERS:** Canon, Epson, IBM, AST, TI, Hewlett-Packard. **VIDEO DISPLAY TERMINALS:** Digital Equipment (DEC), Link, Qume, Tab, Televideo, Wyse. **DATA COMMUNICATIONS:** Hayes.

ATS SERVICE CENTERS:

Los Angeles	(310) 839-0020
Orange County	(714) 937-0332
Oakland	(510) 638-4449
Sacramento	(916) 923-2944
San Jose	(408) 970-9860

INTEGRATED HARDWARE & SOFTWARE PACKAGES:

- Preloaded software: Tested and configured for your computer.
- A wide variety of applications from the latest word processing and spreadsheets, to networked accounting and office management programs.
- Hardware and software support: Not only to setup the systems, but later too, on an on going basis, if needed.
- The Hardware and Software Solution. Programs that work together like one, integrated and configured to optimize your computer system.
- We work with local accountants and software consultants to offer a complete hardware and software package.
- The answer to your office needs, from small personal bookkeeping packages, to large, networked, full-featured accrual accounting programs. Setup and configured for your needs.

FREE ESTIMATES AND CONSULTATION, CALL FOR DETAILS

MasterCard

2 Locations to Serve You:
Leasing Available!

VISA

Fred Haney & Sons Computer Co.
5409 Central Avenue #13
Newark, CA 94560
(510) 792-3505

Express Computer Co.
278 E. Lewelling Blvd.
San Lorenzo, CA 94580
(510) 317-1922

All the benefits of *MicroTimes* without newsprint on your fingers.

Introducing *MicroTimes* online with Mercury Center.

Mercury Center/Online and *MicroTimes* invite your participation in a ground-breaking new service that directly links *MicroTimes* readers with our editorial and advertising.

If you've got a computer and modem, try *Mercury Center* with 10 hours of free connect time by calling 408-297-8495 Monday-Friday 7 am to 7 pm; or Saturday and Sunday, 8 am to 2 pm.

If you're already an *America Online* member, tap into *Mercury Center* at no additional cost. Simply type the keyword "Mercury," click on the business icon and follow the menu to *MicroTimes*. Then it's up to you to choose editorial or advertising...it's all in there! Plus, your *Mercury Center* membership gives you access to the most timely news, information, and services online technology can bring you.

MicroTimes: where you want it when you want it.

Try Mercury Center for 10 hours risk-*FREE*

Try Mercury Center risk-free for one month–up to 10 hours free. If you decide to cancel your subscription, there's no cost or obligation.

Mail or Fax this form to:

Mercury Center
San Jose Mercury News
750 Ridder Park Drive
San Jose, CA 95190
Phone: (408) 297-8495
Fax: (408) 271-3718

Version: ☐ Mac ☐ DOS ☐ Windows
For DOS and Windows, please also tell us:
Disk Size: ☐ 3.5 ☐ 5.25
Density: ☐ High ☐ Low

Mercury Center requires Macintosh or PC-compatible computer, modem, mouse, and a hard disk.

Name:____________________
Address:____________________
City:__________ State:______ Zip:______
Daytime phone:____________________

SAM MEDIA · SAM ACCESS TO MARKETS

Mercury Center Online on AMERICA Online

MICROTIMES

Quality Leader in the East Bay

✓ 5 Year Labor ✓1 Year Parts Computer Warranty

ECI IBM 486 75MHz BLUE LIGHTNING

- 75MHz VLB (Motherboard Made in USA by IBM)
- 16 KB Internal and 256 KB Ext Cache
- Math Co-Processor
- 4MB exp to 64MB on board (4 72-pin Slots)
- 2 VESA Local Bus and 7 16-Bit ISA Slots
- IDE/FDC/2S/1P on Board
- Overdrive CPU Socket
- 1.2 & 1.44 MB Floppy Drives
- 420MB Hard Drive
- 32-Bit VLB Video Card w/1MB
- 14" SVGA NI Monitor 1024x768
- Mid-Tower Case w/230W Power Supply
- Enhanced 101-Key Keyboard
- Hi-Res

Special

$1099 ONLY

ECI Multimedia 486DX-33 256K

GREEN PC

- Intel 486DX-33 w/256K Cache
- 2 VESA Local Bus Board
- Toshiba XM-3401 CD-ROM Drive
- Pro Audio Spectrum 16
- Compton's Internactive Encyclopedia
- 4MB RAM exp. to 128MB
- 1.2 & 1.44 Floppy Drive
- IDE I/O 2FD/2HD 2S,1P,1G
- 420MB IDE Hard Drive
- VLB SVGA w/1MB Card
- 14" SVGA Monitor 1024x768 .28w/Speakers
- Medium Tower Case w/230W P.S.
- Hi-Res Mouse
- Enhanced 101 Keyboard

DX-33	**$1545**
DX2-66	**1589**

NETWORK CARDS

SMC

Elite Plus 16-Bit TP	**$109**
Ethercard Plus TP/Thick	**119**

3COM

Ethernet III TP NIC	**119**
Ethernet III Coax	**139**

INTEL

16" Ethernet Coax Network	**105**
EtherExpress 16TP	**114**

MOUSES

LOGITECH

First Serial	**$39**
Mouseman Serial 400dpi	**59**
Trackman Serial	**79**

MICROSOFT

Microsoft Serial	**$59**
Microsoft bus	**79**

KENSINGTON

Turbo Mouse 4.0	**$95**

Includes a new software package that lets you customize the cursor control. Features comfortably positioned, and easy to press.

ECI IBM SLC2-66

Back To School Sale!

- IBM 486 SLC w/Math-Co
- 64K External Cache exp. to 128K
- 2 VESA Local Bus Board
- AMI BIOS
- 4MB RAM Exp. to 16MB
- 420MB IDE Hard Drive
- Teac 1.44 Floppy Drives
- IDE Controller
- AT I/O 2S/1P/1G
- VLB SVGA w/1MB Card
- 14" SVGA Monitor 1024x768 .28
- Mini Tower Case
- Enhanced 101 Keyboard
- Hi-Res Mouse

Motherboard Made in USA by IBM

$989

ECI VESA Local Bus System

GREEN PC

- Intel 486DX 33/50/66 Processor
- 256K External Cache
- 4MB RAM exp. 128MB
- 1.2 & 1.44 Floppy Drives
- 420MB IDE Hard Drive
- 2S, 1P, 1G, Controller
- 32-Bit VLB Graphics Accelerator Card w/1MB
- 14" SVGA Monitor 1024x768 .28dp
- Mini-Tower Case w/230W P.S.
- Enhanced 101 Keyboard
- Hi-Res Mouse

DX-33	**$1129**
DX2-66	**1169**

Tape Back-Ups

COLORADO MEMORY SYSTEMS INC.

DJ-10 (120MB) QIC-49	**$99**
DJ-20 (250MB) QIC-80	**159**

Trakker™

Parallel Printer Port
External Tape Backup System

120Mb External	$279
250Mb External	$315

CONNER

250MB TAPE STORAGE

INTERNAL	EXTERNAL
RUNS OFF FLOPPY PORT	RUNS OFF FLOPPY PORT
$145 w/ Tape	$299

TEAC FLOPPY DRIVES

1.44MB 3.5" With bracket add $6	**$37**
1.2MB 5.25"	**47**
1.2/1.44MB Dual Drive	**109**

ECI PCI System 486 DX2-66/DX4-100

- Intel 486 DX2-66/DX4-100MHz w/cooling Fan
- 256K Cache Expandable to 512K
- 8MB (72Pin) Exp. to 128MB
- Intel Saturn PCI chipset
- 540MB IDE Hard Drive
- IDE PCI Controller
- 1.2 & 1.44 Floppy Drives
- 2-16550 High Speed Serial Ports, 1 Parallel Port
- ATI Mach 32 Ultra Pro PCI 1280 x 1024 w/2MB
- 15" 1280x1024 SVGA Monitor .28 NI
- Mid Tower Case w/230W Power Suppy
- 101 Key Enhanced Keyboard
- Hi-Res Mouse

DX2-66MHz	**$1769**
DX4-100MHz	**$2145**

SYSTEM UPGRADES

Memory Upgrades to 8/16/32	**CALL**
540MB Hard Disk	Add **$89**
810MB IDE Hard Drive	Add **$219**
1.0GB IDE Hard Drive	Add **$379**
15" Flat Screen .28 1280x1024 NI	Add **$79**
15" Viewsonic 15" Flat Screen .28 1280x1024 NI LR	Add **$215**
15" ADI .28 Flat Screen 1280x1024 NI LR	Add **$149**
17" Viewsonic V-17G/V-17 .28 NI LR	Add **$479/659**
17" ADI .28 5AP 1280x1024 NI LR	Add **$419**
17" SONY .25 GDM17SE1	Add **$699**

FAX/MODEMS

US ROBOTICS

Sportster 14.4/14.4 Fax Modem

Internal	**$105**
External	**132**

PRACTICAL PERIPHERALS

PM 14.4 Fax Modem Int/Ext	**$105/132**

INTEL

Intel SatisFAXtion Modem 1400

The Most Advanced Internal 14.4/14.4 Fax/Modem	**$269**

OTHER

2400 Modem Int	**$39**
2400 Modem Ext	**59**

ZOOM (7 Year MFG> Warranty)

28.8 V .Fast 14.4 Fax Int/Ext	**$195/225**

ECI Pentium P5 PCI Local Bus System

- Intel P5 60/66MHz processor
- CPU cooling fan
- 16KB Internal cache
- 256KB external cache exp. to 512K
- 8MB RAM (72 Pin Expandable to 192MB)
- 540 SCSI Hard Drive or 540 IDE Drive
- Teac 1.2 & 1.44 Floppy Drives
- NCR PCI SCSI II Controller
- ATI raphic PRO PCI 32-Bit 2MB VRAM
- 15" 1280x1024 SVGA Monitor .28 NI
- Full Tower Case w/250W Power Supply
- 101 Key Enhanced Keyboard
- Hi-Res Mouse

60MHz	**$2209**
66MHz	**$2349**
90MHz	**$2749**

IBM MOTHERBOARDS

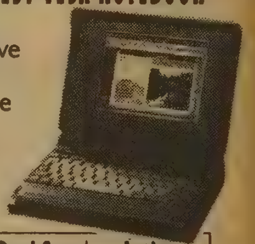
486SLC2-66 VESA LOCAL BUS	**$219**
486SLC BLUE LIGHTNING	**315**

ECI MOTHERBOARDS

386DX-40 128K w/CPU	**$99**
486DX-33, DX2-50, DX2-66, 256K Cache VESA Local Bus No CPU	**105**
486 PCI Local Bus 256K, No CPU	**169**
Pentium PCI 60/66 256K, No CPU	**259**

Acom THE BEST VESA NOTEBOOK

- 4MB RAM
- 170MB Hard Drive
- 128K Cache
- 1.44 Floppy Drive
- 1S/1P
- Built-in Trackball
- Battery Pack
- Carrying Case



Super Sales	VGA Mono	Dual Scan Color	Active Matrix Color
486SX-33	1,385	1,895	2,835
486DX-33	1,519	2,035	3,969
486DX2-66	1,559	2,075	3,015

UPGRADES

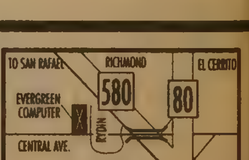
	ADD
Microsoft DOS 6.2 w/system	**$39**
8MB RAM 4MB Ram Card	**219**
12MB RAM 8MB Ram Card	**405**
16MB RAM 12MB Ram Card	**575**
20MB RAM 16MB Ram Card	**749**
258MB Hard Drive	**75**
340MB Hard Drive	**175**
Internal Battery Pack	**95**
PCMCIA Fax Modem 14.4/14.4	**245**
PCMICA LAN (BNC)	**209**
Docking Station(SCSI)	**429**

EVERGREEN

COMPUTER INTERNATIONAL, INC.

2700 Rydin Road #C, Richmond, CA 94804
(510) 526-8667 FAX (510) 526-1447

VISA AMERICAN EXPRESS MasterCard DISCOVER



Serving You for Over 10 Years!

✓Hard Disks ✓CD-ROM Drives ✓Video

MAXTOR

340MB 12ms IDE 7546A	$199
540MB 10ms IDE 7546A	275

FUJITSU

1.0GB SCSI 10ms M2694ESA 3.5"	$629

CONNER

210MB 14ms IDE CPA210	$165
420MB 12ms IDE CPS420A	215
540MB 12ms IDE CFS 540A	279
810MB 12ms IDE CFA 1080A	425
1.08GB 10ms IDE CPA 1080A	529

WESTERN DIGITAL

250MB 14ms IDE WD2250	$205
340MB 12ms IDE WD2340	209
420MB 14ms IDE WD2420	224
540MB 12ms IDE WD 2540	309

QUANTUM

270MB 128K Cache Fast IDE	$205
540MB 11ms IDE LPS 540 AT 128K	289
1.0GB 9.5ms SCSI PD 1080S 512K 3.5"	609
1.4GB 8.9ms SCSI PD 1400A 512K 3.5"	799
2.1GB EMPIRE 512K 8.9ms 512K 3.5"	1169

IBM

250MB IDE 12ms	$185
364MB IDE 364AT 12ms	199
527MB IDE 527AT 12ms	349
728MB IDE 728AT 12ms	485

MICROPOLIS
MC4110S

1.0GB Fast SCSHI 3.5" 8.5ms Seek Time 5400 RPM $655

MC4110A	1.0GB IDE	8.5ms	$655
M2217A	1.7GB IDE	10ms	899
M4110	1.05GB Fast SCSI-2	8.5ms	655
M2217	1.7GB Fast SCSI-2	10ms	929

MONITORS

ViewSonic™

6e	14"	1024x768 .28 NI	$269
15	15"	1280X1024 .28 NI LR FS	419
15EX	15"	1024X768 .28 NI LR IS	379
V17G	17"	1280X1024 .28 NI MAC LR FS	785
V17	17"	1600X1024 .28NI MACII LR FS	869
20	20"	1280X1024 .28 NI	1469
21	21"	1600X1080 .28NI	1635

NEC

15"	3FGE	NI	1024x768 60Hz	28mm	$559
15"	4FGE	NI	1024x768 76Hz	28mm	645
17"	5FGE	NI	1024x768	28mm	959
21"	6FGP	NI	1280x1024	28mm	1939

SONY.

GDM 15SF	15" 1280x1024 .25	$439
GDM 17SE1	17" SVGA .25dpi	939
GDM 20SEI	20" State-of-the art	1810

SVGA MONITOR

14" SVGA Int 1024x768 .28 (Built-in Speakers)	$249
14" SVGA NI 1024x768 .28	223
15" SVGA NI FS 1280x1024 .28	299
14" SVGA NI 1280x1024 .28 (Proton)	249

ADI

4GP 15" NI 1280x1024 .28 LR FS	$369
5AP 17" NI 1280x1024 .26 LR FS	675
SAP 17" NI 1280x1024 .28 LR FS	635

Panasonic 562 (Matsushita) AT Double Speed
320ms Access Time, 320KB Transfer Rate, Photo-CD Compatible
Internal Drive $139
External Kit For Panasonic 522/532/562 .... $60

Mitsumi MPC CD-ROM FX001D
250ms Access Time, 300KB Transfer Rate, Photo-CD Compatible, Caddyless (Includes Card & Cables)
Internal Drive $135

Toshiba XM-3401 SCSI
Fastest CD-ROM, 200ms Access Time, 300KB Transfer, Multi-Spin, Free Caddy
Internal Drive $255

Sony 33A Double Speed
330KB/SEC w/Controller & Cable
Internal Drive $135

NEC SCSI CD ROMS

New Triple Speed:

3Xi Internal 450KB/sec 190ms Original	$439
3Xi Internal 450KB/sec, 190ms CDR510	309
3Xe External 450KB/sec, 190ms	489
3Xp Portable 450KB/sec, 240ms	405

Creative Labs

Wave Blaster	$172
Sound Blaster 16 Basic Value	95
Sound Blaster 16 SCSI 2/with ASP	145/195
Sound Blaster 16 Multi CD/with ASP	135/159
Video Blaster/SE	319/235

DIAMOND SOUND CARD 16-Bit........... $89

MEDIA VISION SPECTRUM 16 PRO AUDIO

- True Stereo Sound
- Advance 20 Voice Stereo Synthesizer
- MIDI Interface

$95

MEDIA VISION Premium III D

- Above with Voice Recognition
- Microphone & Software

$135

Multimedia Specials

audio wave

Platinum 16/Multimedia Kit
Audiowave Platinum 16 Sound Board
- Meets MPC-I & MPC-II requirements
- Sound Blaster Compatible
- MIDI Interface (MPU-401 compatible)

Double Speed CD-ROM Drive w/Controller Cable and Sound Cable
Bundled CD-ROM Software
- Return to ZORK
- Compton's Interactive Encyclopedia
- TestDrive CD-ROM

Speaker System
- 3" Full Range Magnetically Shielded

$249
Limit One Per Customer

GAME PACK
Audiowave Sound Board
- Meets MPC-I & MPC-II requirements
- Sound Blaster compatible
- AISP (8/16 bit stereo recording & playback)
- Enhanced FM Stereo Music Synthesizer
- 20 Voice, Stereo, 4-Operator, Yamaha OPL3 FM Synthesizer
- MIDI Interface (MPU-401 compatible)
- SCSI CD-ROM Interface

JOYSTICK
- Two-Way Switchable Fire-Button
- Auto-Fire Button
- Aircraft-Style Grip

SPEAKER SYSTEM
- 3" Full Range Magnetically Shielded

$79
Limit One Per Customer

Mach 64 Pro Turbo

4MB VLB/PCI	$479
2MB VLB/PCI	279
Mach 32 Ultra Pro 2MB VRAM VLB/PCI	235
Mach 32 Ultra Plus 1MB DRAM PCI	109

DIAMOND

Stealth Pro VLB 1/2MB	$205/285
Speed Star Pro ISA/VESA	109
Stealth 24 VLB	129
Viper SE 2MB VRAM PCI	265
Stealth 32 2MB DRAM PCI/VLB	175/175
Stealth 64 2MB VRAM PCI/VLB	279/294
Speed Star 64 1MB DRAM PCI	135

ORCHID

Kelvin 64 DRAM VLB 1/2MB	$145/189
Kelvin 64 DRAM PCI 1/2MB	145/189
Kelvin EZ 1MB DRAM VLB	109

PRINTERS

HEWLETT PACKARD

DeskJet/DeskWriter Portable 310	$299
DeskJet 520/DeskWriter 600dpi, ink jet	299
DeskJet/DeskWriter 560C 600dpi color ink jet	569
DeskJet 1200c 300dpi, 7ppm, color inkjet	1389
DeskJet 1200c/PostScript	2095
LaserJet 4ML 300 dpi, 4ppm laser, 4MB	979
LaserJet 4MP 600 dpi, 4ppm laser, 4MB	1335
LaserJet 4M+ 600 dpi, 12ppm, 6MB	1869
LaserJet 4L 300 dpi, 4ppm, 1MB	645
LaserJet 4+ 600dpi, 12ppm, 2MB	1379
LaserJet 4p 600 dpi, 4ppm, 2MB	945
LaserJet 4si 600 dpi, 17ppm, 2MB	2819
LaserJet 4simx 600 dpi 17ppm, 6MB	4029
ScanJet IIcx w/interface	929

Canon

BJ-200e	$279
BJ-230 wide	399

American Power Conversion

Backup Power Supplies at Great Prices!

BK250B 200-200VA; back-up power for 386SX, 286SX, 286, XT's and AT's — $109
BK450 — $199

BK600 Back-up up power for heavily configured 386, 486 systems: CAD/CAM — $269
Call for other models!

AP900 Smart-Ups 900
900 VA 286, 386, 486 Servers
Multiple systems, Longer runtime $589

PLAY COMPUTER GAMES ON YOUR TV

TV GAMER PLUS

PLAY COMPUTER GAMES ON YOUR TV

TV GAMER PLUS

NTSC/TV Converter.
Play Computer games on TV.
Video presentations and More.

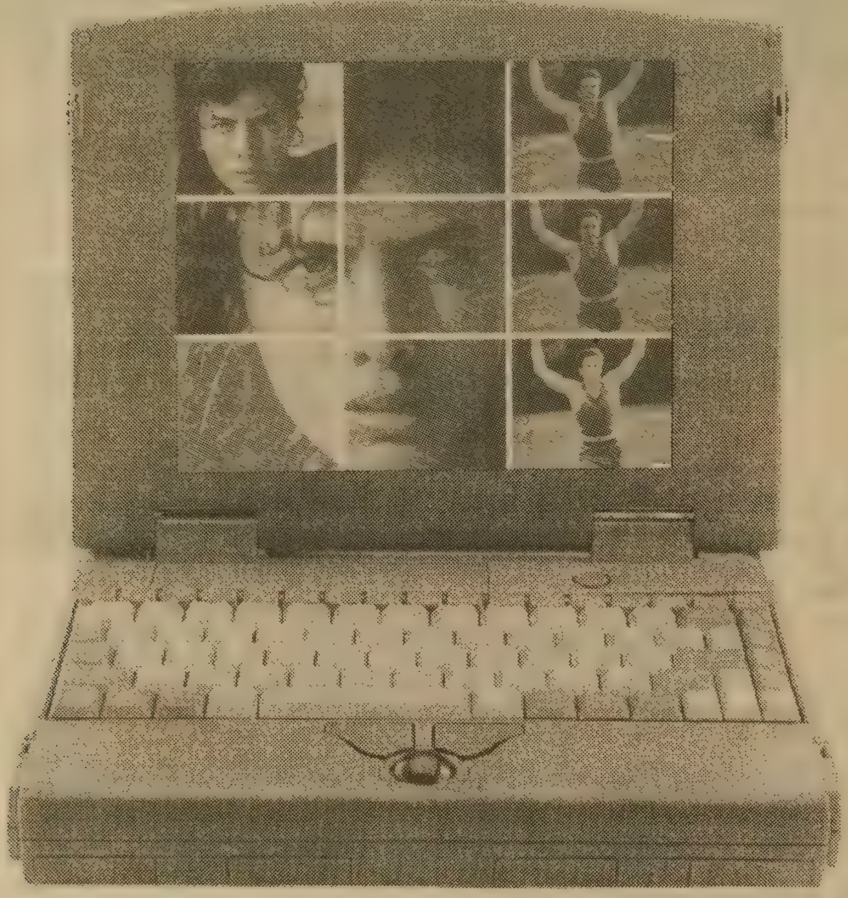
$155

HOURS: 9:30-6:00 Sat 10-5
5 Years Labor, 1 Year Parts Warranty on Evergreen Computers.
Prices subject to change w/o Notice. Not responsible for typo's.
PRICES BASED ON CASH PRICES ONLY

EVERGREEN COMPUTERS INT. (510) 526-8667

ShowBOOK 4E

10.3" *Super Large Color display*



Specifications:

- **Upgradable CPU (25MHz to 100MHz)**
- Flexible Memory Configuration 4/8/12/16/20/36MB RAM
- **128KB External Cache**
- **PCMCIA Type IV Slot (1 Type III and 1 Type II Slots)**
- 3.5" 1.44MB Floppy Drive upgradable to 2.88MB
- **250MB Hard Drive upgradable to 340MB/420MB/520MB**
- **9.5"/10.3" Screen** (Mono, Active Matrix or Dual Scan Color)
- **TRUE 32-bit Local Bus with 1MB Display RAM Supports 1024 x 768 SVGA mode with 256 Colors**
- **Two Battery Compartments allow Hot Swap on-the-fly**
- **Built-in Sound Blaster* Compatible Audio Chip with Microphone & Speakers to enhance multimedia presentations**
- **Advanced Power Management to prolong battery life**
- Built-in 25mm PowerBook* Style Trackball w/ Palm Rest
- Simultaneous Internal/External Keyboard & Video ports
- Optional Easy Docking Station to expand I/O capability
- **Optional VESA Local Bus Multimedia docking station with**
- **Built-in Stereo Speaker, CD-ROM Adapter, and VESA Local**
- **Bus Expansion Slots.**
- Luxury Carrying Case

Leasing Available

The Best has become even Better

This is what the review have to say about the Wedge ShowBOOK...

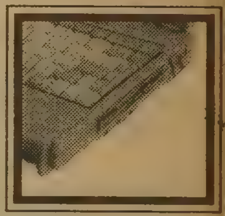
PC MAGAZINE

"The unit's overall performance on our tests was very good. The ShowBOOK ranked in the top five in all tests... The ShowBOOK's standard local-bus video came through to secure the top Graphics WinMark score of ***4.6 million*** *pixels per second..."*

- PC Magazine, Dec 21, 93

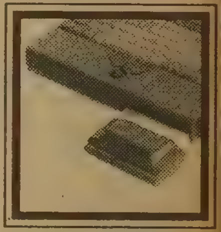
...Wait and see what they will say about our **Enhanced version.**

Multimedia...



Add sound excitement to your presentation or work with recorded WAVE or MIDI files. With additional software, the ShowBOOK 4E can incorporate Voice Recognition.

Hot Swap Batteries...



The standard two rechargeable NiMH battery packs allows for hot-swap of any unit without turning the notebook off. This feature allows for uninterrupted battery usage.

Trackball...

The 25mm trackball located in the center of the palm rest gives you the convenience during any GUI session. No need to carry a mouse and get entangled by the cord.

PCMCIA TYPE IV...

The industry-standard PCMCIA Type IV slot provides expansion for removable hard drives, data/fax modems, network adapters, SCSI adapters, voice mail adapters, sound adapters and other "Credit Card" technology options.

Prices include 4MB, 252HDD, carrying case, AC/DC adapter, and 2 x NiMH batteries with 3 years labor and 1 year part warranty

	Mono	Dual Scan	Active
486SX-25	$1675	$2175	$3075
486DX-33	$1875	$2375	$3275
486DX2-66	$2015	$2515	$3415
486DX4-100	$2245	$2745	$3645

* PowerBook is a trademark of Apple Corporation
* SoundBlaster is a trademark of Creative Lab
* Not responsible for typographical erros
* Prices subject to change without notice

WEDGE TECHNOLOGY, INC. SINCE 1981
Your Partner for Success
1657 McCandless Drive, Milpitas, CA 95035
Sales: (408)263-9888. Fax: (408)263-9886

Also available at:
MERCURY COMPUTERS
1601 Telegraph Avenue, Oakland, CA 94612
(510)763-7631 . (510)763-0814

PC MAGAZINE TOP CHOICE

32-bit VESA
Mono display
486-33MHz
4MB RAM
120MB HDD
$1525

POWERFUL, FLEXIBLE, AND EXPANDABLE

"The unit's overall performance on our tests was very good. The ShowBOOK ranked in the top five in all tests... The ShowBOOK's standard local-bus video came through to secure the top Graphics WinMark score of 4.6 million pixels per second..."

- PC Magazine, Dec 21, 93

PC
MAGAZINE
TOP
CHOICE

ShowBOOK IV: Mainframe Power w/ Expandability of VESA Desktop

- **ShowBOOK IV with Intel 80486-33DX up to Intel 80486-66DX2**
- **4MB, expandable to 20MB**
- **LOCAL BUS VIDEO**
- **128KB External Cache (Optional)**
- **Built-in 16mm Trackball**
- **Simultaneous Internal & External Display and Keyboard**
- **Type III PCMCIA Slots**
- 80/120/200/340MB HDD and 1.44MB 3.5" FDD
- Serial, Parallel, External CRT and Keymouse port
- Deluxe Carrying Case

MULTIMEDIA DOCKING STATION SHIPPING NOW!!!!!

- **Two 32-bit VESA LOCAL BUS Slots and Four 16-bit ISA Slots**
- One 5.25" and One 3.5" Drive Bay
- **Built-in SCSI Controller**
- **Built-in Stereo Speakers**
- 2 Serial, 1 Parallel, 1 Keyboard, 1 Video port

** 3 years labor and 1 year part warranty

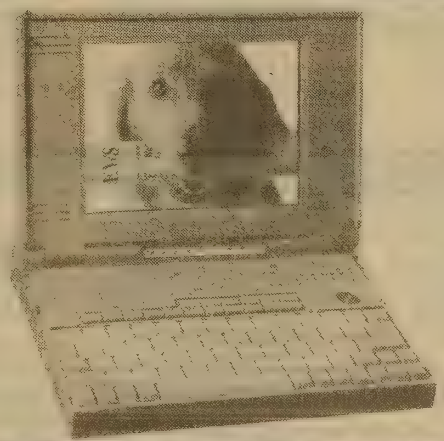
SALE OF THE CENTUR Y !!!

- 486SLC-33MHz CPU
- **4MB of main memory installed**
- 128K FLASH Memory BIOs
- 120MB hard drive
- Removable 3.5" 1.44MB floppy drive
- 10" Monochrome Display
- Built-in 96/24 Fax/Modem
- Built-in Track-ball
- Advanced Power Management
- PCMCIA type II slot
- Two Quick-Charge batteries included
- Weight only 4.6 lbs

Notebook art similar to product advertised

Mono, 486-33
4MB, 120HDD
Built-In Fax-modem
~~$1499~~

Now **$1,099**



ONLY 4.6 LBS!
INCLUDES 2 QUICK CHARGE BATTERIES
REMOVEABLE FLOPPY DRIVE

PCMCIA Adapters . PCMCIA Adapters . PCMCIA Adapters

PCMCIA 14.4 / 14.4 Fax/Modem	$219
PCMCIA 96/48/24 Fax/Modem	$129
PCMCIA SCSI-II adapter (10Mbit/sec)	$249
PCMCIA Ethernet Combo adapter	$179
PCMCIA Sound adapter	$329
Universal numeric keypad	$69
P/S 2 mouse	$39

*** *Call for complete line of* ***
*** *PCMCIA adapters* ***

COMPLETE and POWERFUL UPGRADE SOLUTION FOR DESKTOP

32-bit INTERLEAVE VGA card
Better performance than Diamond Viper VLB ... *PC World 3/94*
- **2MB** of fast RAM for Video [45ns]
- Supports **1280 x 1024** resolution
- Supports **120Hz** refresh rate
- Supports **16.8 million** colors
- Easy installation program

$185

HIGH Speed VLB IO-IDE
- VLB w/ transfer rate 132MB sec
- 2 integrate high-speed NS 16C550 comp UART w/ S/ R/ 16-byte FIFO
- Supports 4 IDE HDDs and 4 FDDs Plus more ...

$58

EISA VESA VLB Universal system main board
- Supports **256MB** on main memory
- **256K cache** included (upto 1MB)
- **Pentium** P24T ready
- Supports **EISA, VESA and ISA**
- Zero Insertion Force socket

$315

WEDGE SINCE 1981
TECHNOLOGY, INC.
Your Partner for Success
1657 McCandless Drive, Milpitas, CA 95035
Sales: (408)263-9888, Tech: (408)263-0225, Fax: (408)263-9886

CALAVERAS BLVD
HWY 237
MAIN ST.
ABEL ST.
CAPITOL AVE.
MONTAGUE EXPWY
McCANDLESS DR.
OLD OAKLAND RD.

Also available at:
MERCURY COMPUTERS
1601 Telegraph Avenue, Oakland, CA 94612
(510) 763-7631 . FAX (510) 763-0814

C l a s s i f i e d s

Accessories

AMERICA'S ADVANCED ACCESSORIES INCORPORATED
AAA
DISKETTES

Premium FORMATTED *(100% Error Free)*

	Qty 500	Qty 50
3.5" DS/HD	35¢	36¢
3.5" DS/DD	23¢	24¢
5¼" DS/HD	21¢	22¢

We Will Beat Any Advertised Price
1-800-214-4444

OPTICAL DISK SUPPLIES
Source for Quality Products

IDEMITSU 3 1/2" MO (128 MB)	$ 28
IDEMITSU 5 1/4" MO (600 MB)	$ 75
KODAK Writable CD (63 min.)	$ 16
CD-ROM Caddy	$ 5

Buy 10, get 10% discount

MPS Mail Order
1-800-247-0013
FAX(719) 475 1845

Accessories

DISKETTES
Unformatted (in packs of 50)
DS/HD 3.5" - 25¢ & 5¼" -13¢
with / without tabs, all
100% guaranteed
(510) 475-0447

Bar Coding

SAVE TIME Using our Bar Code inventory systems for greater profitability. We propose solutions. The recession is over. Time to kick ass: (702) 885-9125.

Bulletin Boards

Log-On Free!
View & Respond to Career Opportunities offered by:
Computer Dynamics, Texas Ins. NEC, IBM and many more...
modem access: (415) 903-5815
Internet Access, telnet:career.com
or college.career.com
Career Connections™
Settings: 8,N,1 Emulations: ANSI or VT100

FIRST ONLINE. Over 30,000 files. 5.2 Gig! Internet Mail and Newsgroups. PC-SIG Library. Huge adult conference. All lines USR 1200-16,800 baud. SAN FRANCISCO: (415) 334-2400 SAN JOSE: (408)257-5800 FREMONT: (510) 797-8730 PLEASANTON: (510) 426-6030.

UNZIP IT! Download sexy GIFs 1 (900) 844-2200. 69¢ per minute. Must be over 18 years old.

Virtual Village (510) 796-3675. Not your daddy's bulletin board. Check it out!

Bulletin Boards

PACIFIC EXCHANGE BBS 408-946-8561. Full Featured BBS with 12 Incoming Data Lines, 50,000 IBM/Window files, 10,000 Adult files, USA-Today online news, Games, Grafittie, Classifieds and more.

Nitelog BBS (408) 655-1096. Email from Internet, Rime and ILink. Files for: DOS, Windows, OS/2, Mac, Win NT, Unix and Adult. 24 lines to serve you. (408) 655-8294 for 14.4K connects.

Bulletin Boards

FREE WINDOWS FILES, Windows OnLine (510) 736-8343 bbs. Get those hard to find public domain Win3 files. Call from your home or office, by modem. Assist your company with their networking of Windows. Developers, upload your demos and shareware for distribution. WOL provides 50 new Win3/DOS files every day & we currently have over 25,000+ Win3 files and 65,000+ total files. WOL has over 650 message and support Conferences. Publisher of the acclaimed WinOnLine Review, and the WOLR Shareware Edition online magazines. WOL staff writers provide reviews of new Win3 software and hardware - US Robotics Dual Standard modems (14,400 BPS) on all 17 phone lines. 13 gigabytes. Visa and Mastercard accepted. Editor & Publisher, Frank Mahaney.

Bulletin Boards

LIBERTY BBS modem 800-474-1818. Local access phone numbers from 9 Calif. area codes. Internet E-Mail & Usenet Newsgroups. Linked nationwide for chat 6pm-midnight every evening! Free time on first & every call!

Venture capital sources for seed money, start-up money, operations, marketing, expansion funding, buyouts. (510) 540-8236.

Cartridge Refill

CARTRIDGES RECHARGED
Laser Printers
HP - Canon - Apple - IBM - NEC - Epson - Okidata - Panasonic & many more
HP 2 & 3 special $24.99 w/ exchange
Super Drum Available
Personal Copiers
PC-20, A-15, A-30
Free Local Pick-Up & Delivery
We Pay Top $ For Empties
Service & Repair Available
100% Warranty
(510) 832-2828 (800) 330-2828

HOW TO PLACE YOUR CLASSIFIED AD IN MICROTIMES

MINI DISPLAYS: 1 column inch = 1 5/16" x 7/8" wide. $59 per col/inch, camera ready art, or $59 + $20 for 1x typesetting/production fee.

BUSINESS ADS: Rates are $20 for 15 words or less. $.50 for each additional word. Your phone number counts as one word. First few words or line is bolded.

CATEGORIES: See index to choose the classification that best describes your product or service.

FREE ADS: Private individuals may have one free classified ad one time of 15 words or less under Hardware, Software, or Accessories only. Mail coupon by the noon deadline for that issue, no phone orders for free ads.

No refunds will be given after copy is received. Credit may be given under certain circumstances.

Mail, deliver or fax this coupon along with payment by the noon deadline for that issue.

TO RESERVE SPACE:
Phone Orders
(510) 934-3700
Fax Orders
(510) 934-7351
with Visa or MasterCard Only

Mercury Center Online

AMERICA Online

MICROTIMES ON-LINE:

A new service to have your ad appear on the BBS. Your ad will be posted in front of millions of potential additional buyers. There is a $10 charge for classified display ads to use this service.

•Your Classified ad in MicroTimes can now potentially reach millions of buyers via computer access!
•FREE access to buyers - Log on (510) 676-5359
$10 Additional charge for paid classified display ads

MICROTIMES On-Line
Electronic Classifieds
PC & Mac Supported

CLASSIFIED CATEGORIES
- ○ Accessories
- ○ Bar Coding
- ○ Bulletin Boards
- ○ Cartridge Refill
- ○ CD-ROM
- ○ Computer Rentals
- ○ Data Conversion
- ○ Data Recovery
- ○ Desktop Publishing
- ○ Hardware
  - ○ For Sale
  - ○ Wanted
- ○ Miscellaneous
- ○ Personals
- ○ Optical Scanning
- ○ Repairs
- ○ Services
- ○ Software
  - ○ For Sale
  - ○ Wanted

CAREER MARKETPLACE CATEGORIES
- ○ Employment Information
- ○ Jobs Offered

CONSULTANTS NETWORK CATEGORIES
- ○ Accounting
- ○ Business Opportunities
- ○ Engineering
- ○ Finance
- ○ General
- ○ LAN
- ○ Legal
- ○ Programming
- ○ Technical Writing
- ○ Training

○ **MULTIMEDIA**
○ Other________

CHECK HERE TO PLACE YOUR AD ON-LINE! ☐

Cost of ad________ x number of issues to run________ = Amt. enclosed________
○ Classified ○ Career Marketplace ○ Consultants Network ○ Multimedia
○ Check/MO ○ Visa ○ MasterCard Credit Card #________ Exp. Date________
Name________
Adress________
City________ State________ Zip________
Phone (____)________

SEND TO: MicroTimes Classifieds, 3470 Buskirk Ave., Pleasant Hill, CA 94523

DEADLINE FOR INSERTION IN THE SEPTEMBER 21, 1994 ISSUE IS NOON ON WEDNESDAY, AUGUST 31, 1994.

Classifieds

Cartridge Refill

Cartridge Refill

REMANUFACTURED TONER CARTRIDGES
AS LOW AS
$34.50
INK JET CARTRIDEGES REFILLED
RIBBONS RE-INKED
FREE LOCAL PICKUP & DELIVERY → *THREE OR MORE*
1-800-484-9896-1055
LOCAL (408) 779-6940
IBM, HP, EPSON, APPLE
CANON, OKIDATA, SHARP
NEC, HITACHI, KYOCERA
TOSHIBA, RICOH, AND
MANY MORE.
100% GARANTEE

Laser Ace. Toner Cartridge recharge for Laser Printers and Canon PC copiers. $34-$39. (408) 263-4608.

LASERPRINTER & COPIER SUPPLIES LCP (800) 404-5028. 100% guaranteed!!! Reman. & New cartridges; OPC units; Upgrades; Developers; for HP, Epson, Panasonic, Canon, NEC, Apple, Okidata, IBM, Ricoh, Xerox + 600 Models. We service/repair most models! Corp. & Vol. discounts. Buy/sell used machines. Pay $$ for empty cartridges. Free delivery! WILL BEAT ANY PRICE! Open M-F 8-7pm. Sat/Sun 9-4pm. Page (510) 618-6127 for 24hrs Emergency Svc.

CD - ROM

ADULT CD-ROMS
THE LATEST INTERACTIVE TITLES
AND CLASSICS, FOR WINDOWS OR MAC.

- ➤Asian Invasion
- ➤Best of Vivid
- ➤Blond Justice
- ➤Fantasies
- ➤Tracy I Love You
- ➤Hidden Obsessions
- ➤Debbie Does Dallas
- ➤Devil in Miss Jones
- ➤Baby's Got Butt
- ➤Beverly Hills 90269
- ➤Deep Tush
- ➤The Beaverly Hillbillies
- ➤Paradise Club
- ➤The Ladies Club
- ➤Deep Throat
- ➤The Mask

AND MANY MORE!
PRICED FROM $10 TO $39
Call: MIP at 1(800)606-0010 for same day
FREE - shipping. VISA or Master Card only.
(Must be at least 21 years of age to purchase)

CD ROM START TO FINISH
CD-R Recording
MPEGI Encording Service
ISO 9660 Conversion
Consulting. Training.
Troubleshooting.
Greg Bergfeld
(408) 923•3372

CD-ROM Mastering
Tadpole Technology
Production and Consulting for
Multimedia or Archiving.
We digitize Video.
510-843-FROG

BARELY LEGAL
ADULT SOFTWARE
65 MEGABIT SAMPLER & CATALOG *ONLY $4.95*
We sell the finest CDs from around the world as well as America's best floppy titles!
24hr. MC/VISA : (909)799-7373

CD - ROM

CD-ROM DRIVES
Toshiba, Plextor, NEC
Soundblaster
Adaptec and Media Vision
Large selection of compact disc software
Caddies • Accessories
COMPUTERS AT LARGE
Saratoga, CA
Dedicated to CD ROM Technology
Please Call for Our Price List
800-642-4194 408-255-1081
408-255-2388 Fax

Adults CD ROM. All ROM disks are menu driven and BBS ready. Titles available PC-pix volumes I and 2, 600+ mega bytes, $159. Erotic Encounters, worlds largest adult CD ROM $139. Storm volumes I, 2 or 3 $159/each. Ecstacy Hot Picks $179. Cal Ad Software, P.O. Box 50204, Long Beach, CA 90815.

CD - ROM

Asian Pearls adult CD-ROM $29.00. 626MB, 100% Asian. 1.44MB Sampler Disk $5.00. CYBERGRAPHIX, 2040 Polk #317M, San Francisco, CA 94109-2520. State Age!

CD-ROM Mastering. Mac-DOS/Windows. Premastering. One-off archiving, audio/video services. Digital Playground (415) 344-0456.

Communications

WIRELESS MESSAGING
Use Your Computer To Send Up To
1000 CHARACTERS
Airtime: Starting At
$15 UNLIMITED CALLS w/pager purchase
Ask For PRE 408-243-8585
Touch Tel Paging®

Data Conversion

COMPUTER DISK & TAPE CONVERSIONS
Micros • Minis • Mainframes
Floppy, CD's, 1/2" & Cartridges
DATA CONVERSION SERVICES
(415) 456-7000

Hardware

Backup power supply $125, new, 225w. Protects against spikes, surges, blackouts, (20-30min.), and equipment damanging brownouts. (415)456-7000.

Data Recovery

Data Recovery

Data Recovery

DATA RECOVERY
DISASTER PLANNING • UPGRADES
▸DOS ▸MACINTOSH ▸POWER MAC
• High Success Rate • Free Estimates • 24 Hour Turnaround Available • No Recovery, No Fee • Referral Program • Courier Pickup
415.495.5556
HIGH IN DEMAND™
381 Clementina Street, San Francisco, CA 94103 Fax 415.495.5553

DATA RECOVERY
24 Hour Turnaround • Free Estimate
DATA-ONE
(408) 434-1002
940 Rincon Cir. San Jose
(HWY 880 & Montague)
9-5 Mon thru Fri

DATA RECOVERY
• MACINTOSH
• OS/2 • UNIX
• DOS • FLOPPY DISK
• NOVELL 286/386
• Recover your data even if it was refused from other company.
• Lastest technology
• Highest success rate
4448 INDUSTRIAL ST
SIMI VALLEY CA 93063
MICRO COM
TEL 805-582-9082
FAX 805-582-9102

Hardware

Hardware

FOR - U COMPUTER, INC.
Computer Liquidation Sale!!!

486SLC/33 64K w/CPU & Math	$110
i386DX/25 128K w/CPU	$55
Color VGA monitor	$120
Color SVGA .28 monitor	$175
101 Keyboard	$11
1MB SVGA controller	$40
Sony 31A CD drive w/ sound card	$80
Sony 535 CD drive w/ controller	$55
6 CD titles	$35
1.44 floppy drive 3 1/2"	$30
386SX complete system w/ VGA monitor	$350
386DX complete system w/ VGA monitor	$430
486DX complete systems w/ SVGA monitor	$890
386 & 486 notebook	$call
Hard drives	$call
MAC PERFORMA 400 w/ color VGA monitor 4/80, keyboard, mouse, sound	$650

Buy, Sell Computer & Electronic Components.
Corporations Welcome.
P:(408) 437-8718 F:(408) 437-8719

WE BUY MEMORY
SIMM - SIPP - DIP - ZIP - SOJ
We'll BUY/TRADE all types
>NEW >OLD >UNSURE
Toshiba Samsung NEC Micron Motorola IBM
Ask about our TRADE-IN program
Call (714) 540-5137
FAX List etc. (714) 540-5139

HARD DRIVE: Unused 2.5" Western Digital HD IDE 170MB for notebook computer $249. External 5.25 floppy drive with power supply with cable for notebook computer $140/OBO. 17" monitor .26dp microprocessor controlled with full warranty, anti glare for Mac or IBM $890. (408) 997-6944.

Upgrade ROM for 3280 to 3280AS DTC SCSI controller $50. (510) 652-9856

Express Mechanical - new systems/custom configurations/486SX-130HD-SVGA $839. 1-800-977-EXPRESS. BBS (510) 317-9685.

Hardware

MEMORY
GUARANTEED LOWEST PRICES
Upgrades for Desktops, Laptops, Laser Printers, from Apple to Zenith.
BEST PRICES ON SIMMS & DRAM

30 PIN SIMMS	72 PIN SIMMS
1X3	1X36
1X9	2X36
4X9	4X36
16X9	8X36

ERITECH INTERNATIONAL
Tel:818/244-6242 Fax:818/502-5059

Computer Supermarket
• Repairs, Service, Upgrades
• Point of Sale Software
• Security Systems & Surveillance Equipment
• Wyse 60 Terminal with Standard Keyaboard
$195
(408) 997-8380
Computer Direct
Wholesale

WHOLESALE PRICES. Summer Specials: 55MB SCSI $55. StarTrek screensaver software $20. Central Point anti-virus $49. 486 50MHz, 1 floppy, 340MB HD, 1MB RAM, SVGA monitor + card, 101 keyboard $820. H/D Specials: CDC 94MB SCSI $135. CDC 150MB SCSI $169. Maxtor 50MB SCSI $115. Maxtor 207MB SCSI $199. Maxtor 280MB SCSI $255. Hitachi MFM $135. 127MB $135. 170MB $159. 80MB Quntum $95. 1MG memory $39 each. 4MB memory $135 each. 1.6GB HD $749. Seagate 340MB IDE $235. 426MB IDE $295. Handheld scanner 32 grayscale OCR imaging SW $99. Color scanner 256K color w/imaging SW $189. Feed sheet scanner 400dpi OCR with imaging SW $490. (408)997-8380 fax (408) 997-8387.

Classifieds

Hardware

MEMORY – XCHANGE

- We Buy & Sell IBM Compatible, Mac, CPU, Memory, Hard Drive
- We Buy Non-Working SIMMs & SIPPs
- Special New 420MB SCSI $325

C.G.I. Technology
Tel (408) 973-9840 FAX (408)973-1925

Mitsubishi Color Monitors (NEW), MAC/IBM Compatible. 21" for $1495. 20" for $695. 16" for $395. (510) 838-1031.

AMI Enterprise IV Motherboard, EISA/VLB, DX2, w/ 32 megs RAM and Adaptec 1742 EISA/SCSI Controller $1950 or BO. (415) 355-9506.

MIPS RISC server/workstation 133MHz, 32M RAM, 500M HD, Windows NT, $5500/OBO. 510/935-9333.

386-20DX, 4MB RAM, 45MB HD, 387 MATH-CO, 64K Cache, 1.2 & 1.44 drives, Mono Monitor. Steve (510) 533-0437.

Macintosh LC 4/40 12" RGB color, keyboard (new), mouse $599. (415) 585-6736 Vince.

Hardware

486SLC33, 4MB, 130MB HD, 16 bit sound card, DBL CD-ROM, 3.5" FD, SVGA card $800. (510) 481-5767 Ben.

Quantum IDE 80MB $60. Conner IDE 40MB $20. VGA card $10. Call (510) 623-6607 9am-6pm.

Bernoulli 150MB drive, SCSI, external, 5 cartridge $650. DTC 3280 optional. Erdi (415) 334-9685.

Brand new IBM 486SX33 8 meg memory, 240 hard drive, 1.44HD, SVGA monitor $1200. Year warranty. Nash (510) 427-5805.

Nanao 21" monitor F760iw (new) and Diamond Viper VLB 2M VRAM, $1880/OBO. Hurry up! Only 3 sets left. (408) 956-1101.

Disk·Drive·Depot

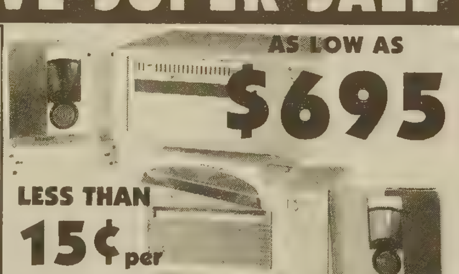
(408)738-3895

OPTICAL DRIVE SUPER SALE

CSC OPTICAL SUBSYSTEMS

MODEL	CAPACITY	CACHE	DDD PRICE
T1	1GB	256k	$1295
T1R°	1GB	256k	$995
T2	1GB	1MB	$1795
T2R°	1GB	1MB	$1495
T4	1GB	4MB	$1895
650	650MB	256k	$695

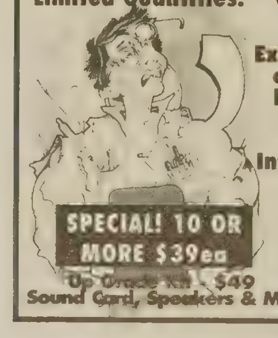
°refurbished



AS LOW AS $695

LESS THAN 15¢ per MB!

(408)738-3895



Limited Quantities!

CD-ROM LMSI 205 $49

Excellent choice for the PC! Super for Photo-CD, Games and Business Data. New design eliminates need for a Caddy. Interface card sold separately-$19

- MULTIMEDIA
- MADE IN THE USA
- PHOTO CD Compliant
- MPC Compliant
- Internal Model

SPECIAL! 10 OR MORE $39ea

Up Grade Kit - $49 Sound Card, Speakers & Mic

500 LAWRENCE EXPRESSWAY

Hardware

Plotter - HP755OA - 8 PEN (color). Will plot up to 11x17 $500/OBO. (415) 573-1099.

Atari 1040 ST, 1 MEG, Monitor, Midi/Math Tutorial equipped. Taking all offers over $150. (510) 843-8457.

Hewlett Packard Laserjett III, 300 dpi, manuals, 2 extra toner cartridges, excellent condition, $650. (510) 793-6922.

NEC 15" monitor, 486DX/33, 170HD, 4 RAM, 2 FD, FAX/MOD, $850. (510) 286-7918.

Plotter ENCAD SP2800, A-E, 6 pens, used 35 hrs. List $3995, yours for $1750. (510) 254-1909.

Two 386 computers 110HD, 1.4/1.2 floppy, 3MB RAM, VGA color, $450, $550 - Mike (510) 794-1909.

386SX LAPTOP/PORT B-JET PRINTER COMBO. Used very little, w/ gobs of SW. $600. (415) 593-5111 after 6pm.

Clone 386SX, 16 MHz, 2 RAM, 2FD, 40HD stacked, amber mono, mouse, modem $250. (415) 771-7218.

Hardware

Dell 386DX, 150HD, 1.44/1.22, SVGA, 4 RAM, printer, modem, software w/books. $700/OBO. (510) 937-7041.

20" SVGA monitors, 1280x1024, .31dp. $795 includes 2 meg S3 Windows accelerator card. (510) 825-0300.

HP 5MB Faskdisk for LX100/Omnibook $220/or trade for RAM/HD. Larry (408) 292-2751 or 773-3788.

Network Boards - Kodiak Quad 16 Bit with 4BNC connectors and software drivers * retail $459, sell $100 new. Also available, other 8 + 16 bit generic LAN boards and some 8 port hubs. (408) 293-5456.

EISA 486DX66 8MB RAM, 340HD Adaptec SCSI, SVGA, CD-ROM/Sound, complete system. $1550. (408) 226-6250 eve.

GARAGE SALE! Recent versions, Lotus, Microsoft, Corel, OTHERS. Sept. 10th, 8am-3pm. 2055 Norse, Pleasant Hill. (510) 671-9160.

CLEARING OUT! 386/8meg portable, Amiga, video capture board. Sept. 10th, 8am-3pm. 2055 Norse, Pleasant Hill. (510) 825-0798.

Laser printer, Packard-Bell 9815, 2 paper trays, developer kit, 3 toner carts, $350. (415) 593-7273.

Hardware Wanted

WANTED USED HEWLETT PACKARD LASERJETS MODELS II OR ABOVE. ALSO BUY COMPAQ, IBM PS/2, AST. WORKING OR NOT. (415) 344-9536.

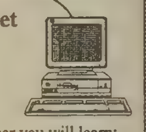
LEFTOVER MEMORY from an upgrade "rusting" in your drawer? We buy memory, sets may be worth $75 or more. MICRO MASTER 707/664-8925.

TOP $$$ PAID. TOP $$$ PAID. TOP $$$ PAID. TOP $$$ PAID. TOP $$$ PAID. TOP $$$ PAID. Memory, CPU's, Mac, HD's, Sun, IBM. (408) 955-9080.

Internet

Internet

Ask about our other Internet seminars and schedule



Doing Business on the Internet Seminar

Sept. 29 or Oct. 26, 1994
9 am - 12 noon or 1 - 4 pm

The Internet is now open for business! In this 3 hour seminar you will learn:

- How organizations large and small are doing business on the Internet.
- How you can do business on the Internet.
- The risks, costs, and benefits.
- How to plan for doing business on the Internet.

Computer College Silicon Valley
(415) 325-Do-It

INTERNET

Unlimited access for just $16 a month

Graphics based accounts also available

dial into any of the local access points & login as guest

Walnut Creek (510)-988-7140
Bishop Ranch (510)-355-3030
Oakland (510)-419-3600 local to SF

CCnet

190 N.Wiget Ln, #291, Walnut Creek, CA 94598
voice(510)-988-0680, fax (510)-988-0689

Hardware Wanted

PLEASE! Donate a 386 or less color computer system to a disabled person. Call (510) 895-6958.

Donate computers for public use. 801 El Camino Real, Ste. 168, Mtn. View, CA 94040.

$$$TOP CASH PAID$$$ for CPU, Memory, DRAM, Hard Drives, Systems and Components. IBM-Mac-Sun. (408) 280-6558. Pager (408) 864-3051.

Project New Start (a 501(c)(3) non-profit) needs hardware /software for vocational training of poor women. Macintosh/PCs. (213) 484-1486, ask for Mary.

UPGRADING TO A DX2, DX4 or PENTIUM? We'll buy your old i486 CPU. DXs worth $100 and up. MICRO MASTER 707/664-8925.

Personals

Sexual Dates Bay Area Men/Women/Gay/Lesbian/Bi-sex Females. 1-900-844-2121 ($1.95/min.) NEW! Bay Area nude beach info.

Personals

ADULTS! "The BEST for LESS" 49 cents per/min. Talk to, date hot local women tonight. Fantasies fulfilled! (408) 345-7051.

Beautiful Russian Ladies. Sincere, educated, want to meet American men for marriage. Free brochure, call 24 hrs/day. (415) 776-4457. Correspondence International, 1850 Union Street, #1094, San Francisco, CA 94123.

Repairs

PC Repair IBM, PC's or compatible. Upgrade, house calls, free diagnosis. Guaranteed lowest price. Networking. Computer training (classes or videos) for all software and networking. (408) 997-6944.

MONITOR REPAIR. $39 + parts. Free estimate. BOMA TV & ELECTRONIC SERVICE. 415/292-5623, 1450A Bush St. (at Van Ness), SF.

Monitor and Terminal Repair. $50 most models. Warranty. 30 years experience. Call Beyond Repairs 510/783-6805.

Computer Troubleshooting & Repairs. Lowest Rates! Guaranteed Service and Support. 24hrs/7days. FRP Data Services (408) 377-1470.

Classifieds

Optical Scanning

Why enter data by hand?

If you can create a form...

we can capture it automatically !

Hand Print Recognition

800-SCAN
543 HOWARD
SF CA 94105

Check Boxes (OMR)

Could you use automatic reading of check boxes to speed your data entry operation ?

○ ☑ ○ ○
○ ○ ● ○
○ ○ ○ ☒

Imaging **OCR** **CAD**

CD-ROM **Walk in Scanning**

New Version 3

$1,695.00

Automatic Data Entry Software Package

Includes... Forms Designer, Hand Print & OCR Recognition, Check Boxes Reading

Works with Fax boards and Scanners

Orders Only 1 800 800-7226
Questions 1 415 974-6194

©1994 800-SCAN * 543 Howard Street * San Francisco CA 94105

Repairs

Computers, Copiers & Laser Printers Repair

MAC & IBM Compatible • We do Networking Service

$44.99+Parts (carry-in rate)

FASTEST RESPONSE !!!

DTAC Computer 130 Lewis Rd. • Suite 2 • San Jose • CA 95111

1-800-898-DTAC / (408) 225-4654
Mon-Fri 9:30-8:00 Sat - Sun 11:00-4:00

Monitor Repair Specialist

Expert Service on All Makers & Models

$50 Flat Rate

Excluded (CRT, FBT & Bezel)
Any PC VGA,SVGA Monitor up to 14"

Monitor for PC, Mac, Workstation.
Power Supply for PC, MAC.

Compu Monitek Services, Inc.
3582 Arden Road, Hayward, CA 94545 Tel: (510)264-1682 Fax: (510)264-1684

C:\Computer & Monitor Sale & Repair

State Reg. No. E29924

$75 + Parts*

PC Compatibles & Macintosh Monitors & Printers

SERVICE CITY

1655 Whipple Rd.
Suite 22, Hayward, CA 94544
Fax (510) 475-7739

(510) 475-0747
*Carry-in service rate. tm055

HP Printer Repair, Apple Printer Repair, Canon Printer Repair, Panasonic Printer 'Repair, Save 10%. LaserSharp (408) 224-0520.

Repairs

PC MONITOR & TERMINAL REPAIR

ANY SIZE, ANY BRAND USED BY
PC, MAC, WORKSTATION or MAIN FRAME

COLOR, SVGA, VGA, EGA, CGA & Mono

Lowest price * Free estimate * Free pickup * Free Delivery
Fast Turnaround * 4–Months warranty
Individual, Corporation, Manufacturer Welcome

SELL,TRADE, BUY NEW & USED MONITORS, PCs, GRAPHICS CARDS

California Monitor Services

4767 Lafayette #103, Santa Clara, CA 95054
TEL: (408) 986-8327 FAX: (408) 986-8328

DRIVE REPAIR & DATA RECOVERY

SYST. SERVICES & UP GRADES

MAC, IBM, COMPAQ,DOS, NOVELL, SUN, UNIX, LAN, OS/2 & MORE.

ON SITE SERVICES, FREE ESTIMATE, LOW RATE

DATA RECOVERY TECHNOLOGY

TEL. 408-249-1986• FAX. 408-249-1987
5029 Stevens Creek Blvd., Santa Clara, CA 95051

COMPUTER REPAIR FREE DIAGNOSTIC

WHY PAY $40, $50 or MORE

Computer Training Academy will run a thorough diagnostic service check absolutely FREE!! Call Now for an appointment to have your equipment evaluated Today!

408-441-6990 ask for Mr. Stevens

CTA Inc.

COMPUTER MONITOR SERVICE

- *We Repair:* *Mobius, NEC, Panasonic, Radius, Raster Ops, Sun Micro, Zenith & others*
- *Pick-up & Delivery Service*

IBE International Business Electronics, Inc.

Call 1-800-IBE-2422 for Quote
NATIONWIDE SERVICE SINCE 1984

Computer/Mac/Printers Repair Services

PRO-SERVICES
(408) 943-0144
Beeprs(408) 233-4190

Labor Only

Dot Matrix Printers **$39+parts**
Laser Printers.......$49+parts
Personal Comp.....$49+parts
Monitors........................$85
(excl. CRT & Flybck.Transfmr.)

2542 Seaboard Avenue . San Jose
(Trimble &North 1st Street)

FACTORY AUTHORIZED MONITOR SERVICE CENTER

All makes & models, $50 for most monitors. Free parts. Free estimate, free pick-up..120 days warranty.

UNIVOX MONITOR SERVICE CENTER
1020 Commercial St., Suite 104, San Jose, CA 95112
TEL:(408)453-5453 FAX:(408)453-5452

Monitor & Terminal Repair Specialist

Expert on All Models

$50 + parts
(carry-in rate)

Any sizes, Models of VGA, SVGA

Power Supply for PC, MAC Workstation
Quality Commitment & Competitive Price

TV & T Monitor Service
408/225-4609 Mon-Fri 9:30-5:00

Monitor & Terminal Repair

All Brands, free estimate.
100 days warranty.
We do delivery and pick-up.
(415) 637-3968
BAY TOOL ELECTRONICS CO.

FAST - AFFORDABLE - COMPU-HELP! Set-Up - Configure - Upgrade - Repair - Troubleshoot. Hardware Sales. DOS - Windows - DBase - WORD Perfect - Installation & Training. IBM compats. Only $25 per hour. Call John Herring (510) 527-3711.

Monitor Repair Specialist

Expert Service,
10 years, Any Model,
Any Size

- Terminal -
- SVGA,
- VGA, Mac,
- Multisync
- FREE pick up, delivery, estimates
- 2 days turn-around time
- 90 days warranty

$60 Flat Rate

LMR Monitor Repair
35762 Orleans Drive
Newark, CA 94560
Tel (510) 793-0388
Fax (510) 487-9230

The TOTAL MAC

Laser Printers
Mac Systems
Data Recovery

Free Pickup & Delivery in S.F.
On-Site Service
Most Repairs $60 + Parts

415-386-4320

C l a s s i f i e d s

Repairs

UniTek Co.
Hard Disc Services
Specializing in repair
of PRIAM
CONNER, MAXTOR, SEAGATE Hard Drives
From 85¢ per MB
(408) 263-9994

Your Mac Broke Down? Need Repair/Upgrade?

Call
(800) 622-7977
(408) 747-1555
Fax: (408) 747-1110

We will BEAT any competitive price

Motherboard repair as low as	$75.00
Power supply repair as low as	$45.00
800K/1.4M Floppy drives	$59/$75
Powerbook repair specialist	CALL!!
LaserWriter	CALL!!

24 HOUR SERVICE TURNAROUND
LONGER WARRANTY/FREE DIAGNOSTIC
DT&T Macintosh Service
363 Wendell Dr., Suite 1, Sunnyvale, CA 94089

Services

nexpensive printer repair. Dot Matrix, HP Laserjets, Daisywheel Printers. Please call (415) 668-2318.

Cover Your Computer. Creative, Elegant, Practical. Choose your individual design for custom sewn computer/peripheral covers. (408) 481-9551.

Slides $8
4x5 Transparencies
PC Imaging Specialists
Presentation Graphics
Quattro Pro
.TGA .PCX .TIF .GIF
McLain Imaging
tel: (408) 252-6266
bbs: (408) 252-6265

IPCMCIA TESTING: Continental Viking Laboratories is an established local government approved, electronic and environmental testing laboratory. We have been serving the space and defense industry for over 35 years. We now offer a full range of environmental and mechanical testing services to the PCMCIA segment of the electronics industry. For more details, please call (415) 969-5500.

Services

Services

Services

FOR HIRE... Typist--2,500 WPM

NEW! CD-ROM OUTPUT!
Why buy expensive hardware and software? Use our cost-effective quality service.

Any Printed Material Into Any IBM or Mac Program...FAST!

1-800-300-SCAN
Same Day Service

SCAN TYPE™
Scanning/OCR Services

SOFTWARE DUPLICATION

Complete Software Manufacturing Solutions

- Duplication 100% Guaranteed
- Highest Quality Media & Equipment
- 24-Hour Turnaround
- Custom Labels/Sleeves/Manuals
- Packaging, Assembling & Shrink-Wrapping
- Warehouse & Fulfillment
- Graphic Design & Advertising Services
- Ultra-Competitive Prices

APC, Inc.
29620 Union City Blvd. Union City, CA 94587
Local 510-489-8677 Fax 510-489-8678
800-666-1007

DATA RECOVERY SERVICES

★ Specializing in data retrieval from hard drives with electronic or mechanical failures
★ Comprehensive software data recovery from **hard drives**, **floppies**, and **tape**
★ Over 2,000 successful data recoveries

DRS

DRIVE REPAIR SERVICES
DATA RECOVERY and DISK DRIVE REPAIR
- 2122 Adams Ave., San Leandro, Ca. 94577
- (510) 430-0595 FAX (510) 430-0145
- 6151 Golfview Dr., Bloomfield Hills, Mi. 48301
- (313) 645-6211

DOS - NOVELL - UNIX - MAC - OS/2

SOFTWARE DUPLICATION FROM $.29

Lowest Prices
Will beat anybody's prices*

Error Free Duplication
4-Hour Turn-around
- Certified High Quality Media
- Printing, Packaging, and Fulfillment Services
- Tapes/CDROM Duplication

Saicom, Inc.
(800) 724-2666
(510) 438-4550
(510) 770-8658 (fax)
43272 Christy St. Fremont, CA 94538

Don't Delay, Do it Today!!!

DUPLICATION
IBM OS/2 • MACINTOSH • APPLE
COMMODORE • UNIX
CD ROM
24 Hour Turnaround.
Fastest in the West,
No Minimums!!! Custom Printed
Tyvek Sleeves & Labels
Optical Text Scanning
I.D. DISK CO. 415-883-4628
NATIONWIDE 1-800-987-7509

MICROTIMES
YOUR ONLY REAL COMPUTER SOURCE

Services

Services

SALE · UPGRADE
REPAIR · DATA RECOVERY

DATA RECOVERY

CAPACITY	MFM/IDE/RLL ESDI/SCSI
20 - 39MB	$250
40 - 49MB	$300
50 - 89MB	$350
90 - 159MB	$400
160 - 199MB	$450
200 - 299MB	$500
300 - 399MB	$550
400 - 499MB	$600
500 - 2GB	$650

*** SPECIALIZE IN DOS, MAC, NOVELL**

*** Data recovery includes repair of the drive.**
*** No charge if we are unable to recover data.**

HARD DRIVE REPAIR PRICE

CAPACITY	MFM/ IDE/RLL	ESDI/ SCSI
20 - 39MB	$35	$45
40 - 49MB	$55	$60
50 - 89MB	$75	$80
90 - 159MB	$85	$90
160 - 199MB	$95	$100
200 - 299MB	$105	$110
300 - 399MB	$125	$130
400 - 499MB	$135	$140
500 - 679MB	$155	$160
700 - 2GB	$185	$190

FLOPPY DRIVE REPAIR PRICE

5.25" (360K & 1.2MB)	$20
3.5" (720K & 1.4MB)	$25
3.5" PS/2 (720K & 1.4MB)	$35

SPECIAL SALE OF THE MONTH

HARD DRIVE

CONNER/SEAGATE/WESTERN DIGITAL/MAXTOR

260MB	IDE	NEW	$185
340MB	IDE	NEW	$199
420MB	IDE	NEW	$229
540MB	IDE	NEW	$289

* 1 Year Warranty On New Hard Drive

20MB	MFM	REF.	$49
40MB	MFM or IDE	REF.	$95
30MB	RLL	REF.	$55
40MB	RLL	REF.	$65
20MB.	SCSI	REF.	$55
150MB	ESDI	REF.	$129
330MB	ESDI	REF.	$189

* 6 Months Warranty On Refurbished Drive.

WE BUY & TRADE-IN WORKING OR NON-WORKING HARDDRIVES

FLOPPY

1.2MB TEAC	REF.	$34
1.44MB TEAC	REF.	$29
(1.2, 1.4MB Chino)	NEW	$35;$35

CONTROLLER

MFM(AT or XT)	$39
RLL(AT or XT)	$39
IDE w/I/O	$15
SCSI(AT)	$55

PRO COMPUTER COMPANY

12761 Western Ave., Suite B
Garden Grove, CA 92641
Tel.: (714) 891-8293
Fax: (714) 891-3269

Business Hours:
9:00am to 6:00pm Mon. thru Fri.
Sat. 10:00am to 4:00pm

Prices subject to change w/out notice

Classifieds

ervices

Services

omplete Software Duplication Services
Formats from Apple to Xerox & CD ROM
- 24 Hour Turnaround on most jobs
- Custom labels
- Competitive pricing

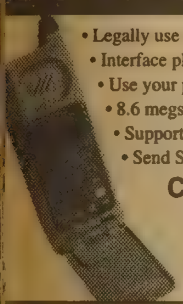
MANUAL
IDI
FAST

International Datawares, Inc.
408-262-6660 or 800-222-6032
2278 Trade Zone Blvd., SJ, CA 95131

oftware

Software

Cellular Software



- Legally use 2 or more phones with one account
- Interface phone to computer for testing, etc.
- Use your phone as a scanner and listen to calls
- 8.6 megs with book and free gift
- Supports over 20 phones $149
- Send S.A.S.E. for catalog

Call Mark at (805) 486-1940

Cellular
MASTERS

3410 Frankfort Court, Oxnard, CA 93033

Software

MANUFACTURING SOFTWARE: Are you sitting on the fence? Knowing you have to TIME your inventory usage. We sell and support fully integrated MRP-Accounting software. (702) 885-9125.

FREE IBM SOFTWARE CATALOG. Low Prices, Best Selection, ASP Vendor - BRIGHT IDEA! SOFTWARE, 5339 Prospect Road, Suite 197M, San Jose, CA 95129. VOICE/FAX (408) 252-0542.

ADVANCED DATABASE REPORTING TOOL - Easy - Fast - Unopened Cognos Impromptu. $595 retail. Best offer/trade. (415) 821-6060.

AutoCAD R12 MAC (or any platform) over 50% off, new in box $1850. (510) 254-3324.

Microsoft Word v.5.1a + Excel v.4.0 for Macintosh (never used w/ manuals) $175/OBO. (415) 397-7672.

Introducing
SuperCut
for Windows

uperCut *for* Windows is a useful utility for copying and pasting portions of our screen into multimedia & desktop publishing applications. Simply copy a portion of the reen by dragging around the area you want to capture and save it to the clipbook. Then opy or cut the item from the dipbook and paste into the application of your choice.

Transfer Mac files in three simple steps

Mac•In•DOS

ow Windows or DOS users can read, rite and format Mac diskettes the conenient way. To see why Mac•In•DOS still first in file transfer, call today for ore information.

- Enables users to cut any screen anytime, anyplace, anywhere
- The cut data can then be deposited in a custom clipbook
- Designed to be a key utility for multi-media and desktop publishing

Call today 1•800•628•3475
415•948•6200 FAX 415•948•6296

Pacific Micro
201 San Antonio Circle #C250
Mountain View, CA 94040

vell Netware v3.1120-er. Two packages left in ock. $1600 new. Out of siness. (415) 343-7659.

uattroPro 4.0 $40. Quat-Pro Win $40. Norton esktop 2 $40. Windows aw 3 $40. (408) 479-25. Marcelo.

tention Attorneys & anagers! Ecco Pro 2.0 lved, with my Enhanced mpmlates. No setup quired, Ready to Go. tails, (510) 654-4359.

Big opportunity to make money, automate your client's business. Buy the rights to our vertical market applications and sell them under your name. Manufacturing, Distribution, Accounting System, Church Management, Medical and Dental Billing. Integrated Solutions (818) 843-5126.

Next Step Developer, Desqview X, Sense-8 WTK i860, Zortech C++, more. Stephan (415) 431-1230.

Orcad Schematic Design Tool for DOS v.4.10, release IV. Never opened. $150. (408) 721-7090.

Wanted: Any old version of AutoCAD up to $500, must be upgradable. (408) 942-8750, 262-3911 Mai.

Project New Start (a 501(c)(3) non-profit) needs hardware /software for vocational training of poor women. Macintosh/PCs. (213) 484-1486, ask for Mary.

Consultants Network

Engineering

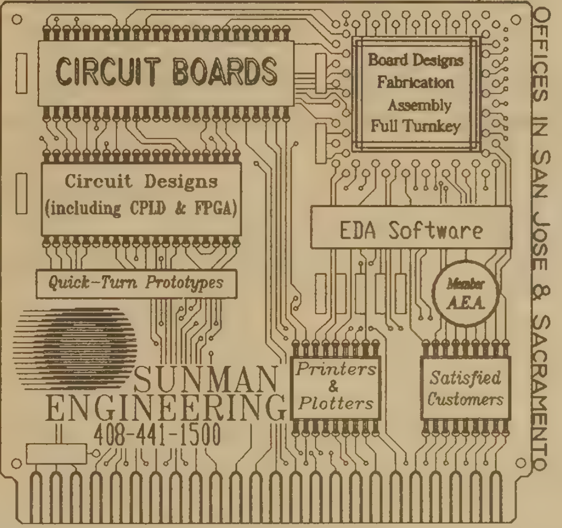
Engineering

CIRCUIT BOARD LAYOUTS

PRECISION DESIGNS • EXPERT SMD RESULTS
SINGLE/MULTI LAYER • TTL • ECL • ANALOG • FLEX
QUICK TURN • COMPETITIVE PRICING
COMPLETE DOCUMENTATION

EtchLine Designs
Superior PCB Design Service
408 246-8565

226 AIRPORT PARKWAY #400 SAN JOSE, CA



C++ Object Framework Design, Implementation, Porting, & Testing for Win32, UNIX, and Macintosh. 5 years C++ Experience, Extremely Rapid Development. Philosopht Software 408.481.0563.

General

PC/Network Help. Installation, administration & training. DOS, Netware, Windows for Workgroup, eMail, fax, MS Access. Low rates. A++ Associates (408) 997-5005.

Internet, Unix, C Programming help. Dennis McNamara has been computing since 1968. (415) 661-5845.

General

FREEMAN'S ALMOST FREE CONSULTING. Low rates for installing new systems or adding new hard or floppy drives, modems, printers, CD-ROMs. Also configure DOS or Windows software for optimum performance. Can give you shareware games, menus, freeware, utilities and delightful things you didn't dream existed. Kyle Freeman (415) 621-4430.

General

TSG
The Stradivarian Group
Professional Computer Services
Macintosh/DOS/Windows
- Software Installation
- Hardware Installation
- Custom Programming
- Networking • Training

(408)257-4482

Expert PC Help

Installation and configuration assistance, puchasing recommendations, problem solving, repair of PC, monitors, laser printers, etc. DOS, UNIX, LINUX, networks, etc. Affordable Satisfaction Guaranteed.

(510) 283-6264

Custom Programming
Low Rates. High Quality.
Object Oriented Programming.
Latest Tools.
C, C++, Visual Basic,DOS,
Windows, NT, UNIX, X, Motif,
Relational Databases.
SOFTWARE A TO Z, INC.
Ph: (408) 263-0775
Fx: (408) 263-0777

Computer Service and Support. Troubleshooting - Upgrades - Installs - System Analysis and Preventative Maintenance. Low Rates! FRP Data Services (408) 377-1470.

MICRO TIMES
Classifieds
510.934.3700

GET MORE OUT OF YOUR COMPUTER!

Friendly computer wizard with experience will help maximize your use of:
- Accounting
- Word Processing
- Database
- Spread Sheet

Free first consultation • Sampson Information Systems
415/469-9852

Professional Technical Services

DOS, Windows & OS/2 support for business

• Setup & configuration • Novell & Lantastic networks •
• Programming • Data recovery • Debugging • Communications •
Microsoft Excel, Access & Visual Basic programming

On-site support 24 hours a day - 7 days a week

John Purins 415-340-1744

LAN LAN LAN LAN LAN LAN

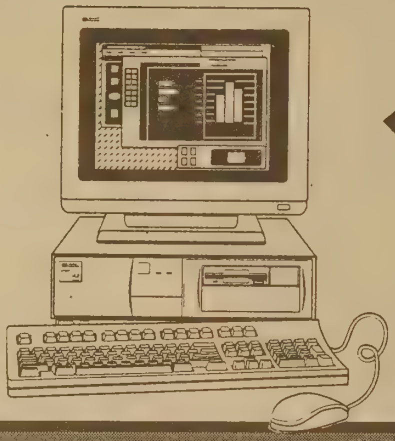
SAY GOOD-BYE TO NETWORK NIGHTMARES

With Network Solutions by

KIS
KEEP IT SIMPLE COMPUTER CENTER
&
HEWLETT PACKARD

The HP Vectra VL2 PC
Affordable, expandable, high-quality

The HP AdvanceStack Hub
State of the art, HP quality



KIS Network Services make the connections

CALL KIS Computer Center TODAY
For a Quote on any PC Hardware or Software Product or for a Free Network Consultation
(408) 942-8088

Make Your Business Run More Productively!

Novell NetWare
V4.x, V3.x, V2.x, & Personal

Trained and tested to provide superior NetWare support.

- Design & Installation
- Maintenance contract
- Troubleshooting & Test
- Hardware & Software
- Services & Support

The best Sales/Contact Management software
TeleMagic for Windows
TeleMagic for DOS V.14

Lotus BUSINESS PARTNER
Lotus CC:Mail, Router,
Link to UUCP Internet
Lotus Notes (Windows & Netware)

Microsoft SOLUTION PROVIDER
Microsoft Windows & Windows for Workgroup
Microsoft Windows NT & NT Advanced Server
Microsoft Office for Windows & electronic Mail

486, Pentium Workstations & File Server
from
Acer America
AST Research
DEC PC
EPSON
IBM PS Value/Point
NEC Technology

V88 Systems, Inc. 1538 Centre Pointe Dr. Milpitas, CA 95035 Tel: (408) 957-5738 Fax: (408) 945-1660

Novell Gold Authorized Reseller

- Installation
- Management
- Sales CNE PA

Abbott Computer Services
(510) 528-8773

NOVELL Certified Netware Engineer. Installation, service and troubleshooting, 10 years experience. LAN SOLUTIONS, Novell authorized reseller. (415) 579-1004.

LAN and TELEPHONE CABLE INSTALLATIONS. LOW prices. One year warranty. RPS TELEDATA, Lic. #688214. (510) 980-2714.

Guaranteed Network Solutions. Lowest Rates! Installs, Configurations, Troubleshooting, Service & Support. FRP Data Services (408) 377-1470.

Your Objective:
Certified NetWare Engineer (CNE)
Our Objective:
Help You Pass ALL Exams with Proper Training
PC Net, Inc.
provides Open Labs,
Excellent Teaching,
Hundreds of Tests
Questions on NetWare
System Administration
UNIX Administration
TCP/IP, Network Tech.
NetWare Service/Support
In Sept.: 7 Course CNE
for $2195 only
2 Course UNIX
for $799 only
(408-452-8508)

Programming

CMOS LAYOUT DESIGN, DEBUGGING, and BREADBOARDS. tel: (408) 377-4824 fax: (408) 559-7630.

NOVELL NETWORKS

Certified NetWare

- *Design and Installation*
- *Hardware and Software Configuration*
- *Support and Service*
- *Free Consultation*

COMTEQ COMPUTER CO.
(408)988-4440

Programming

SCIENTIFIC PROGRAMMING. Data analysis/presentation. Databas design. Scientific/technica writing. System administration. Norcov Researc (510) 559-9645.

CUSTOM DATABASE Fox Pro, Access, dBase Clipper, Paradox. Multiuse systems, software modifications, code generators PC/LAN, SBT. Walter S John: voice (510) 549 9165; fax (510) 649-1804

Consultants Network

Legal

IMMIGRATION

Law Offices of **Paul M. Heller**

Specializing in

Labor Certification & Work Visas

for

Engineering, Computer, Accounting, Business, & other Professionals.

Also: family visa/US spousal cases; changes to student (F-1) status; Treaty Trader/Investor (E-1/E-2); Intra-company transferee (L-1)

Individual, Bus. & Corp. Clients

Free Consultation!

Now doing personal injury!

415-291-8000

Programming

WINDOWS custom programming, C/C++, porting, MS Test, database, installers, online help, training. (408) 985-2875.

Windows & LANs

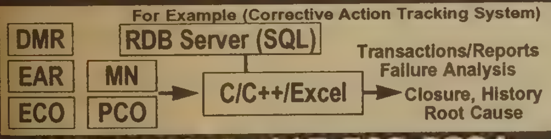
Custom software using Visual Basic - Access - C since 1979

SYSPRO Corp

(510) 254-9755

CAD to CAM & Q/A SYSTEMS

For Example (Corrective Action Tracking System)



THEOCOM 415 508 0821

Database Programming

- ♦ FoxPro Programming
- ♦ Clipper Programming
- ♦ Network Installation
- ♦ Accounting systems
- ♦ System Administration
- ♦ Windows and DOS

Novell Certified NetWare Engineer

AccounTech

408/266-2660

Since 1983 ♦ Member BBB

Programming

Oracle, PowerBuilder, Access
FoxPro, C++, VB, Windows, NT
Arlington Computer Associates
510-284-9033

Developer-publisher w/11 years exp.: design, code, test, manuals, support. Prof. prgrmng in C++, Windows, Clip/Fox, etc. Hardware sales/services.

(415) 362-2595

→PARADOX←

- ✓ Programs/Networks
- ✓ Troubleshooting
- ✓ On-Site Training

oTm Enterprises
(510) 886-1557

MACINTOSH PROGRAMMING. Individualized, custom software written to meet your needs exactly. Call Robert (909) 654-3774.

American Computech. Scientific, database, graphics, etc... We write C & C++, FoxPro, Visual Basics, Prograph, Assembly, Pascal, etc... $35/hour. (510) 530-4706.

Programming

Software

THE BIG PICTURE ACCOUNT AND CONTACT MANAGEMENT FOR SALES PROFESSIONALS. The Big Picture database manages business relationships. It places critical client information at your fingertips. An essential tools in building and maintaining solid client relationships. BUSINESS: Forecast sales revenue. Track competition. Shorten the sales cycle. Customize to model your sales funnel. CALENDAR: Schedule appointments, phone calls, letters, to do's. Conflict checking and alerts are fully customizable. Your calendar and contact database work together. CONTACT: Pump up sales and improve customer service. Nothing slips through the cracks! You are always on top of activity with your contacts. ACCOUNT: Your database becomes your own private marketplace. Improve sales pipeline analysis. Target specific groups for marketing campaigns. Measure the effectiveness of direct mail, trade shows or advertising campaigns. Requirements: 386 or above, 4 mg RAM recommended, Windows 3.1, and 2 meg for program on your hard drive. We can customize it for your business and train your staff. Call today for your free evaluation copy. (415) 381-1844. West Portal Software Corporation.

Tech Writing

Custom manuals, documentation, help text and training materials for your software or application. Call Larry (415) 692-0824 or (800) 837-7334.

Training

Computer Training

Hands-on Training for the PC & Mac

PC INTRO	*$89* half day
MAC INTRO	*$139* full day
WINDOWS	
WORD	
AMI PRO	*WORKS*
WORDPERFECT	*QUICKEN*
EXCEL	*QUICKBOOKS*
LOTUS 1-2-3	*POWERPOINT*
QUATTRO PRO	*PERSUASION*
ACCESS	*PAGEMAKER*
PARADOX	*FRAMEMAKER*
FILEMAKER PRO	*and many more!*

InfoMind

408/243-1121

MacAcademy instructional videos - Pagemaker, Photoshop, Macromind, Free Hand, Excel, Filemaker, Superpaint and more. Sales and rentals (415) 255-9760.

Learn Internet, Unix, C by modem. Study when / where you wish. (415) 564-8896 8-N-1.

Macintosh Help. One on one training in English, no technobabble. Also purchase advice, set-up, troubleshooting, networking, installs/upgrades by Apple certified technician. Call Frank at Yoyodyne Systems (415) 879-0285.

Employment Information

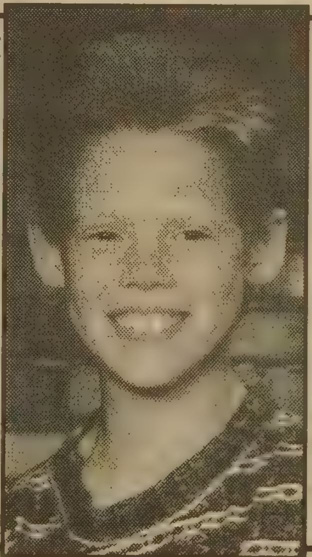
SALES REPRESENTATIVE for hi-tech retail store. Excellent opportunity for person with computer hardware knowledge. Must have good communication skills and enjoy customer service. Friendly environment. Fax resume to: (408) 541-8459.

PLEASE...
RECYCLE THIS ISSUE OF MICROTIMES.

Serving America's Most Endangered Children
National Headquarters
408-971-4VCA
P.O. Box 909 • Los Gatos, CA
95031-0909

1407 Parkmoor Avenue,
Suite 200 • San Jose, CA 95126

HAVE YOU SEEN THIS CHILD?
If so, please call!
800-VANISHED
Sightings ONLY



PENCE, Casey

Date of Birth:
10-02-83

Date Missing:
08-08-93

Missing From:
Las Vegas, NV

Brown Hair & Brown Eyes

Missing Type:
Family Abduction by Mother

Vanished Children's Alliance
OUR CHILDREN, OUR FUTURE

CALL THE QUALITY LEADER

NAME BRAND COMPONENTS • LOW PRICES
SUPERIOR SERVICE & SUPPORT • LIFETIME
LABOR & 1 YEAR PARTS WARRANTY
FREE LABOR ON UPGRADES

- **72 Hour Burn-In & Quality Control**
- **Lifetime Free Phone Support**
- **Gov/Corp PO's Accepted**
- **24Hr or Less Repair Time**

(Most Done While You Wait)

EMINENCE
PENTIUM SERIES

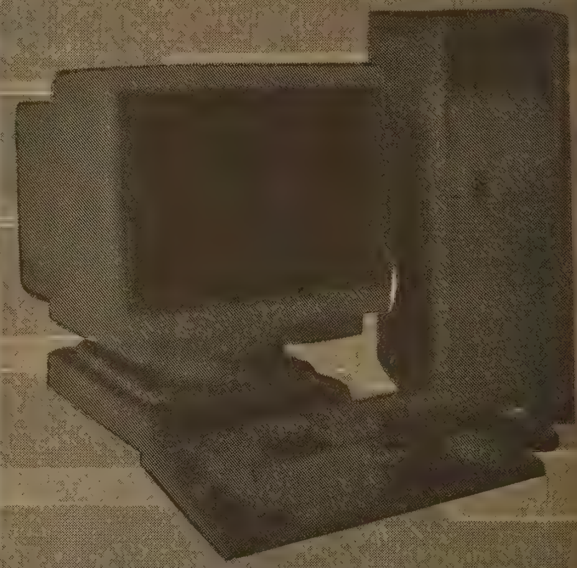
INTEL® PLATO 90MHs Motherboard w/256K
Neptune Chipset /3 PCI/5 ISA/1PCI/ISA Slots
INTEL® Pentium 90MHz 3.V w/CPU Fan
8MB RAM (Expandable to 256MB)
Built-In SMC PCI IDE/I/O Controller
w/2 16550AFN Serials & 1 Parallel Ports
Maxtor or Quantum 540MB IDE HD
Stealth/32 PCI 32-Bit SVGA Card w/2MB
Viewsonic 15ex or MAG DX 15F 15" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouseman
Maxiswitch 101-Key Enhanced Keyboard
Deluxe Full Tower /300W, 2 Fans, Side Doors
Microsoft DOS 6.22 & Windows 3.11

$2735

SYSTEM UPGRADES

SCSI DRIVES	
540MB CONNER	[illegible]
1.0GB MICROP	[illegible]
1.0GB QUANTUM	[illegible]
1.8GB QUANTUM	[illegible]
1.75GB MICROP.	[illegible]
MISC	
USR 14.4K Int. Fax	[illegible]
250MB TAPE DRIVE	[illegible]
2.0GB WangDAT	[illegible]
ADAPTEC 2940	[illegible]
16MB	[illegible]
24MB	[illegible]
32MB	$860

VIDEO BOARDS	
ATI ULTRA/2MB	[illegible]
VIPER W/2MB	[illegible]
ATI TURBO 64/2MB	[illegible]
ATI TURBO 64/4MB	[illegible]
MGA II w/2MB	[illegible]
MONITORS	
VIEWSONIC 15	[illegible]
NEC 4FGe 15"	[illegible]
VIEWSONIC 17G	[illegible]
NANAO F550i 17"	[illegible]
VIEWSONIC 17	[illegible]
NEC 5fge 17"	[illegible]
VIEWSONIC 21	$1390



EMINENCE
DELUXE 90MHz

SCSI / ATI 64 PCI / 16MB / 17" Monitor

Neptune Chipset /3 PCI/5 ISA/1 PCI/ISA Slots
INTEL® Pentium 90MHz 3.V w/CPU Fan
16MB RAM (Expandable to 256MB)
Built-In SMC PCI IDE/I/O w/2 16550 Sers & Par
Adaptec 2940 PCI 32-Bit Fast SCSI-2 Card
Maxtor or Quantum 540MB IDE HD
ATI TURBO 64 PCI SVGA Card w/2MB
Viewsonic 17G or Nanao F550i 17" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouseman
Maxiswitch 101-Key Enhanced Keyboard
Deluxe Full Tower /300W, 2 Fans, Side Doors
Microsoft DOS 6.22 & Windows 3.11

$3890

PROPHECY
486 PCI SERIES

AIR® 486 PCI/VLB USA Made Motherboard
256K Cache /3PCI/5 ISA/2 VLB/ISA Slots
INTEL® 486 DX2/66 or 486DX4/100 CPU
8MB RAM (Expandable to 256MB)
PCI 32-Bit IDE Controller w/2 Ser/1 Par
Maxtor or Quantum 540MB IDE HD
Stealth/32 PCI 32-Bit SVGA Card w/2MB
Viewsonic 15ex or MAG DX 15F 15" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouseman
Maxiswitch 101-Key Enhanced Keyboard
Mid Tower /250W & CPU Cooling Fan
Microsoft DOS 6.22 & Windows 3.11

DX2/66 $1995 **DX4/100 $2335**

SYSTEM UPGRADES

SCSI DRIVES	
540MB CONNER	[illegible]
1.0GB MICROP	[illegible]
1.0GB QUANTUM	[illegible]
1.8GB QUANTUM	[illegible]
1.75GB MICROP.	[illegible]
MISC	
USR 14.4K Int. Fax	[illegible]
250MB TAPE DRIVE	$160
2.0GB WangDAT	[illegible]
ADAPTEC 2940	$200
16MB	[illegible]
24MB	[illegible]
32MB	$860

VIDEO BOARDS	
ATI ULTRA/2MB	[illegible]
VIPER W/2MB	[illegible]
ATI TURBO 64/2MB	[illegible]
STEALTH/32/2MB	[illegible]
MGA II w/2MB	[illegible]
MONITORS	
VIEWSONIC 15	[illegible]
NEC 4FGe 15"	[illegible]
VIEWSONIC 17G	[illegible]
NANAO F550i 17"	[illegible]
VIEWSONIC 17	[illegible]
NEC 5fge 17"	[illegible]
VIEWSONIC 21	$1390

INSPIRE
MULTIMEDIA

66Mhz / 540MB / 8MB / 15" Monitor

AIR® 486 VLB Motherboard
256K Cache /3PCI/5 ISA/2 VLB/ISA Slots
INTEL® 486 DX2/66 or 486DX4/100 CPU
8MB RAM (Expandable to 64MB)
VLB 32-Bit IDE Controller w/2 Ser/1Par
Maxtor or Quantum 540MB IDE HD
Kelvin 64 VLB 32-Bit SVGA Card w/1MB
Sound Blaster Discovery Multimedia Kit w/Panasonic Dual Speed 300KB CD ROM, SB 16, Speakers, Mic, & 5 CD ROM Titles
Viewsonic 15ex or MAG DX15F 15" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouseman
Maxiswitch 101-Key Enhanced Keyboard
Mid Tower /250W & CPU Cooling Fan
Microsoft DOS 6.22 & Windows 3.11

$2150

INSPIRE
486 VLB SERIES

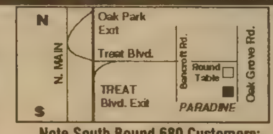
AIR® 486DX VLB USA Made
256K Cache /3 VLB/5 ISA Slots
INTEL® 486 DX2/66 or 486DX4/100 CPU
4MB RAM (Expandable to 256MB)
VLB 32-Bit IDE Controller w/2 Ser/1Par
Maxtor or Quantum 540MB IDE HD
Kelvin 64 VLB 32-Bit SVGA Card w/1MB
Impression 1024x768 .28 14" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouse
Maxiswitch 101-Key Enhanced Keyboard
Mid Tower /250W & CPU Cooling Fan

DX2/66 $1395 **DX4/100 $1755**

SYSTEM UPGRADES

SCSI DRIVES	
540MB CONNER	[illegible]
540MB QUANTUM SCSI	[illegible]
1.0GB QUANTUM SCSI	[illegible]
1.0GB MICROP. SCSI	[illegible]
1.75GB MICROP.	[illegible]
MISC	
USR 14.4K Int. Fax	[illegible]
250MB TAPE DRIVE	[illegible]
2.0GB WangDAT	[illegible]
ADAPTEC 2940	[illegible]
8MB	[illegible]
16MB	[illegible]
32MB	$1060

VIDEO BOARDS	
ATI ULTRA/2MB	[illegible]
VIPER W/2MB	[illegible]
ATI TURBO64/2MB	[illegible]
STEALTH/32/2MB	[illegible]
MGA II w/2MB	$280
MONITORS	
VIEWSONIC 15	$225
NEC 4FGe 15"	$345
VIEWSONIC 17G	[illegible]
NANAO F550i 17"	[illegible]
VIEWSONIC 17	[illegible]
NEC 5fge 17"	[illegible]
VIEWSONIC 21	$1530



Note South Bound 680 Customers:
Exit Oak Park left on North Main, left onto Treat Blvd 3 Miles from 680

PARADINE
COMPUTER SYSTEMS
Oak Grove Plaza Annex • 2958 Treat Blvd., Suite A • Concord, CA 94518

Hours:
Mon-Fri 9:30-7:00
Sat 10:00-5:00
No Surcharge

VISA MasterCard

Call the Quality Leader
(510) 825-6068
Fax: (510) 825-5940
BBS: (510) 825-0997
Leasing/Financing Available.
Prices subject to change without notice.
Not responsible for typographical errors.

Your power hungry applications giving your system as much respect as a TRS-80 with a broken tape drive? Why settle for a new system that wil just "enhance" those applications?

KICK THE LIVING DAYLIGHTS OUT OF THEM

You deserve the best and Paradine Computer Systems is here to give it to you. We don't play around with cheap no-name components, and cut corners just to have a lower "advertised price". That's because we know there's no room in high performance computing for the squeamish or wishy washy. We use high quality name brand components, and have the technical expertise to get you the BEST Price/Performance Ratio on a system. So you'll get a fair price on a system with enough backbone to take on your toughest applications! Let us show you the difference and enable you to RULE your computing world!

EMINENCE
SERIES

PENTIUM 90MHZ PREMIUM SYSTEM

INTEL® PLATO 90MHs Motherboard w/256K
Neptune Chipset /3 PCI/5 ISA/1PCI/ISA Slots
INTEL® Pentium 90MHz 3.V w/CPU Fan
8MB RAM (Expandable to 256MB)
Built-In SMC PCI IDE/I/O
  w/2 16550AFN Serials & 1 Parallel Ports
Adaptec 2940 PCI Bus Mastering RISC Based
  Fast SCSI-2 Controller Card
Micropolis or Quantum 8.5ms SCSI-2 1.0GB
ATI Turbo Graphics Pro 64 PCI w/4MB
Viewsonic 17 or Mamao F550i-W 17" Monitor
Sealth/32 PCI 32-Bit SVGA Card w/2MB
Viewsonic 15ex or MAG DX 15F 15" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mousemand
Northgate Omni NI 101 Keyboard
Deluxe Full Tower /300W, 2 Fans, & Side Doors
NEC 3Xi Triple Speed 450KB/Sec 195ms
  Internal SCSI-2 CD ROM Drive
Sound Blaster 16 Sound Card
Labtec Amplified Speakers
Grolier's Encylopedia + 5 CD Titles
250MB Colorado or Conner Tape Drive
US Robotics v.34 28.8 Ext. Fax/Modem
Microsoft DOS 6.22 & Windows 3.11

$5325

EMINENCE
60MHZ PENTIUM

INTEL® 60Mhz Motherboard/256K
Mercury Chipset /3PCI/5 ISA/1PCI/ISA
INTEL® 486 DX2/66 or 486DX4/100 CPU
8MB RAM (Expandable to 256MB)
Built-In SMC IDE I/O w/2 16550 Sers/1Par
Micropolis or Quantum 540 MB IDE HD
Stealth/32 PCI SVGA Card w/2MB
Viewsonic 15ex or Mag DX15F 15" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouse
Maxiswith 101-Key Enhanced Keyboard
Mid Tower /250W & CPU Cooling Fan

$2195

PROPHECY
POWER PCI SYSTEM

66/100Mhz/540MB
16MB/17" Monitor

AIR® 486DX VLB USA Made
256K Cache /3 VLB/5 ISA Slots
INTEL® 486 DX2/66 or 486DX4/100 CP
16MB RAM (Expandable to 256MB)
PCI 32-Bit IDE Controller w/2 Ser/1Par
Maxtor or Quantum 540MB IDE HD
Viper Pro PCI32-Bit SVGA Card w/2MB
MAG DX17F .26 1280x1024 17" Monitor
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouseman
Maxiswith 101-Key Enhanced Keyboard
Mid Tower /250W & CPU Cooling Fan
Microsoft DOS 6.22 & Windows 3.11

DX2/66 $2775 **DX4/100 $3095**

INSPIRE
DELUXE VLB SYSTEM

66/100Mhz/540MB
8MB/15" Monitor

AIR® 486 VLB USA Made
  256K Cache /3 VLB/5 ISA Slots
  INTEL® 486 DX2/66 or
  486DX4/100 CPU
8MB RAM (Expandable to 64MB)
VLB 32-Bit IDE Controller w/2 Ser/1Par
Maxtor or Quantum 540MB IDE HD
Stealth/64 VLB 32-Bit SVGA Card w/2MB
Viewsonic 15ex or MAG DX15 15" Monitor
Stealth 64 VLB 32-Bit SVGA Card w/1MB
Teac 3.5" 1.44MB & 5.25" 1.2MB Floppies
Microsoft Mouse 2.0 or Logitech Mouse
Maxiswith 101-Key Enhanced Keyboard
Mid Tower /250W & CPU Cooling Fan
Microsoft DOS 6.22 & Windows 3.11

DX2/66 $1995 **DX4/100 $2335**

COME SEE ALL THESE SYSTEM CONFIGURATIONS AT OUR NEW EXPANDED SHOW ROOM!

All systems are fully configured with DOS, Windows, Drivers, and any other software included with the particular system/package.

We also provide FREE installation of any other software you wish to bring in!

MULTIMEDIA

MULTIMEDIA BUNDLE

Fusion Double 16 LX
- Pro Audio Spectrum 16
- NEC Int CD-RM Drive
- Pair of Speakers
- 5 CD-ROM Tiles Including:
Comptons Encylopedia, & 7th Guest

$295

MULTIMEDIA ANSWERS!

All the different Sound Cards & CD-ROM's can get confusing. Just give us a call for an Upgrade Kit with the Performance, Price, & Features that meet Your Personal Needs.

SOUND CARDS

Sound Blaster Value	$89
Sound Blaster 16	$115
Sound Blaster 16 Multi CD	$165
Sound Blaster 16 Multi CD ASP	$195
Sound Blaster 16 SCSI-2	$195
Sound Blaster 16 SCSI-2 ASP	$215
Sound Blaster AWE 32	$295
Pro Audio Spectrum 16 w/SCSI Interface	$110
Pro Audio 16 w/SCSI CD Interface	

CD-ROM DRIVES

NEC 3Xi Triple 450KB/Sec 195ms SCSI (OEM)	$385
Toshiba 3401 Dual 330KB/Sec 200ms SCSI	$325
Mitsumi Dual 300KB/Sec 290ms AT Bus	$165
Panasonic 562-B Dual 300KB/Sec 320ms AT Bus	$165

CREATIVE

MULTI-MEDIA BUNDLES

Game Blaster:
- Sound Blaster 16
- Dual Speed Internal CD-ROM Drive
- Joystick,
- Pair of Speakers
- 7 CD-ROM Titles Including:
Sim City 2000, Iron Helix, & Rebel Assault

$395

Discovery CD 16:
- Sound Blaster 16
- Dual Speed Internal CD-ROM Drive
- Joystick,
- Pair of Speakers
- 5 CD-ROM Titles Including:
Groliers Encylopedia, Aldus Photostyler 2.0, Karaoke, & MultiMedia Book

$315

PARADINE NETWORKING

Got a small office with 2-10 computers that you want to link together? Have 2+ systems at home and tired of moving floppies back and forth every time you want to copy something from one to the other? Need an easier and faster way to transfer data between your desktop system and your notebook? Then a peer-to-peer network may be your solution. Give us a call and we'll set-up a Lantastic or Windows for WorkGroups network to best suit your needs. It's fast, easy and affordable. Call today for a free quote! Total Network costs can be as low as $125/Node!

NETWORK CARDS

SMC Elite 16 Combo	$139
Intel Etherexpress 16C	$149
Lantastic AE/2	$199
NoeRunner 2000	$195

10 BASE T HUBS

SMC 8 Node	$329
Intel 8 Node	$339
Lantastic 8 Node	$315
Intel 12 Node	$549

MISCELLANEOUS

Lantastic 6.0 (1 Node)	$79
Windows For Work Groups v3.11 Single User	$75
Cables/Other Net Items	CALL

FULL LANTASTIC 6.0 AND WINDOWS FOR WORK GROUPS PS DEMOS ON DISPLAY!

N
S
N. MAIN
Oak Park Exit
Treat Blvd.
TREAT Blvd. Exit
Bancroft Rd.
Round Table
Oak Grove Rd.
PARADINE

Note South Bound 680 Customers:
Exit Oak Park left on North Main,
left onto Treat Blvd 3 Miles from 680

PARADINE
COMPUTER SYSTEMS

Oak Grove Plaza Annex • 2958 Treat Blvd., Suite A • Concord, CA 94518

Hours:
Mon-Fri 9:30-7:00
Sat 10:00-5:00
No Surcharge

Call the Quality Leader
(510) 825-6068
Fax: (510) 825-5940
BBS: (510) 825-0997
Leasing/Financing Available.
Prices subject to change without notice.
Not responsible for typographical errors.

ADVERTISER BY CITY INDEX

For your convenience, here is a list of advertisers by county and city. Please see the advertiser index on page 340 for the page number of the advertisement.

Alameda County

Albany
UMiracle MicroSystems

Berkeley
ComputerLink
Domino Computer Self Service Centers
Photo Drive Up
McTek Systems
Whole Earth Access
Winners Circle Systems

Castro Valley
Auto Exec Computer

Dublin
Comtek Computer
Kingstar Computer
Now Computers

Fremont
A&A Technology
Bold Data Technology
CompExpress
Domino Computer
Elma
Edge Technology
FRY's Electronics
Gigabytes
Golden Micro Computers
Intelesys
J&K Technology
Libre Service Computer, Inc.
NCA Computer Products
Reffko
Songtech International
UMiracle MicroSystems
USM Systems

Hayward
CBE Systems
Cypress Computer
Domino Computer Self Service Centers
MCT, Multi Connection Technology
Printer Works

Newark
SCSI Works Computer Products

Oakland
Domino Computer
Mercury Computers
MIS Services

Pleasanton
AT&T Training
Comtek Computer
Domino Computer
Libre Service Computer, Inc.

Union City
Granite Digital

Contra Costa County

Concord
AIM Computers
Backyard Computer
Domino Computer Self Service Centers
Nordic Computers
Paradine Computers
Walnut Creek CD Rom
Whole Earth Access

El Cerrito
HD Computers
Positive Solutions
JIS Technology

Lafayette
EFI's Discount Computer

Pleasant Hill
Computown
Paramont Computers
R-Computer
Port Chicago Loading Dock

Richmond
Evergreen Computer

San Ramon
Domino Computer Self Service Centers
Nordic Computers

Walnut Creek
Alpha Fine Furniture
CompuMart
Systems Unlimited
The Computer Store

Marin County

Mill Valley
Marketpro Shows

Novato
BCSA Computers

San Rafael
Domino Computer Self Service Centers
Hi-Q Systems
Whole Earth Access

Monterey County

Seaside
Jones Communication

Sacramento County

Sacramento
Computer Leap
The Computer Store
Domino Computer Self Service Centers
Halted Specialties
HD Computers
Hi-Q Systems
Libre Service Computer, Inc.
Whole Earth Access

San Francisco County

San Francisco
Beta Nineties Computer, Inc.
Binary Information Systems
California Computer Company
Clarity Technologies
City Computer
Comart Business Systems, Inc.
Compudata
The Computer Store
Computown
Domino Computer Self Service Centers
Evernet Education Services
HD Sytstems
Horizon Training
ITS CD
Konicom
Libre Service Computer, Inc.
MicroLink Data Systems
Net USA
USM Systems
Whole Earth Access

San Joaquin County

Stockton
Hi-Q Systems

San Mateo County

Burlingame
Robert Austin Corporation

Daly City
Domino Computer Self Service Centers

Foster City
General Micro
Kensei International
Laitron Computers

Millbrae
Domino Computer Self Service Centers

San Bruno
Comtek

San Carlos
Belmont Systems, Inc.
Hi-Tech USA

San Mateo
Now Electronics
Whole Earth Access

South San Francisco
Beta Nineties Computer, Inc.
Comet Microsystems
Computerland of Serramonte
Fastlink Network Products
Universal Computer Products
USM Systems

Santa Clara County

Campbell
Domino Computer Self Service Centers
Fry's Electronics

Cupertino
Cupertino Computer

Los Altos
Domino Computer Self Service Centers
IQ INFoQuest Computer

Menlo Park
Alpha CD Imaging

Milpitas
Bay Computer
Beta Nineties Computer, Inc.
C.B. Memory & Computers
Comand Line Computers
Art Computer Tech
Computown
Domino Computer Self Service Centers
Elpin Systems
Hi-Tech USA
Laitron Computer
Legend Computer
Linden Microtech
Netis Technology
Wedge Technology
World Net Microsystems

Morgan Hill
Computer Outlet

Mt. View
Computown
Compucare
The Computer Store

Palo Alto
Access Computer
Cardservices Int'l
FRY's Electronics
GMI, Inc.
New River
Palo Alto Micro
PC Warehouse
USM Systems

San Jose
Accura Technology
American Computer Research
ARM Computer
AMT International
Big Bang Technology
CGI Technology
Chicotec
Clarity Tech
Commax Technology
Domino Computer Self Service Centers
Golden Gate Computer
Grand Micro International
International Microdevices
ISC Computers
JDR Microdevices
LCI
Miracle Computers
NCA Computer Products
Novacorp Inc.
Oak Warehouse
Paulus Computer
Pixel/USA
Prestige Computer
Sound Mind Technology
Tower Computer
Truecomp America
Whole Earth Access
WIT International

Santa Clara
Access Computer Technologies
Arde Electronics
ASA Computers
Best Data Systems
Central Computer
C & J Computer
Cypress Computer
Computer Express
Comtek Computer
Domino Computer Self Service Centers
Halted Specialities
Hitron Systems
Compu X USA
Jemini Electronics
Laptop Superstores
Peripherals Direct
PSC Computing
Rainbow Computer
Sonic Computer
Storage Systems Engineering
Symphony Computer
Tanstaafl
Technoland
USM Systems

Sunnyvale
Angle Technology
American Multi Systems
Aroma Computer
ASP Computer Products
Binari Star International
Commandline Computers
Corporate SystemCenter
Disk Drive Depot
Domino Computer Self Service Centers
FRY's Electronics
Golden Valley Systems
HD Computers
Hi-Q Systems
HKG Computers
Legend Computers
LTI Leopard Technology
NCA Computer Products
Network Associates
PC Warehouse
PromoX Systems
Schwab Computer
Sushi Depot Restaurant
Top Data
United Microsytems
USM Systems

Santa Cruz County

Capitola
Libre Service Computer, Inc.

Solano County

Vallejo
Domino Computer Self Service Center
Contra Costa County

Sonoma County

Cotati
Halted Specialities

Petaluma
Pacific Coast Show Productions

Stanislaus County

Modesto
Aroma Computer

Out of State

Okidata
Computer Discount Warehouse
Number Nine Computer Corp.

COMART

BUSINESS SYSTEMS, INC.

THE PRICE LEADER

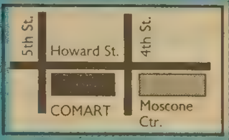
STORE HOURS:
Mon. thru Fri. 9:00-5:30
SAT. 11:00-4:00
Prices subject to change
Not responsible for typographical errors

Easy Financing

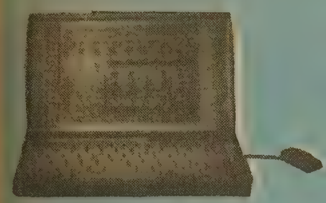
MasterCard · AMERICAN EXPRESS · VISA

415/896-1765
Fax: 415-896-2582

843 Howard St.
San Francisco,
CA 94103



HEWLETT PACKARD



HP OmniBook 530 Superportable PC's

-HP OmniBook 530: 4/130
-HP OmniBook 425: 486SLC/e.2/40

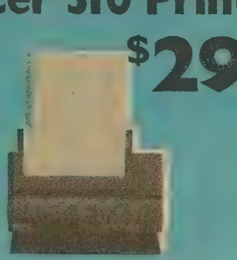
- Expandable RAM; optional plug-in fax modem
- Weighs less than 3 pounds; 2 PCMCIA compatible
- DOS & Windows
- Built-in appointment book, phone book, HP calculator, laplink® Remote Access™
- Long battery life
- Built-in, pop-up mouse

$1699

In Stock

HP DeskJet/Writer 310 Printer

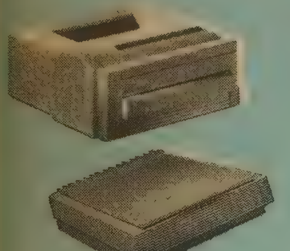
- Up to three pages/minute
- 300 dpi, optional color printer
- 35 scalable fonts, True Type™ and ATM™ compatible
- Serial or AppleTalk connections
- WYSIWYG color matching using Apple ColorSync Support
- 60-page cut-sheet feeder optional



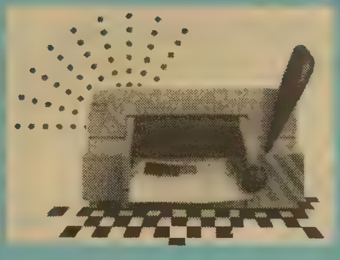
$299

HEWLETT® PACKARD

HP LaserJet Printers & Scanners



HP LaserJet 4Si/4Si MX Printers	Call
HP LaserJet 4+/4M+ Printers	Call
HP DeskJet 1200C/1200CPS Printers	Call
HP DeskJet 520/560C	Best Price!
HP DeskWriter 520/560C	Best Price!
HP LaserJet 4P/4MP Printers	$969/1359
HP ScanJet IICX/IIP Scanners	Call
HP LaserJet 4L/4ML Printers	$639/999
HP Fax-900/950 plain paper fax	$799/979



$289/569

HP DeskJet 520/560C Printer

- 600x300 dpi black
- Resolution Enhancement technology (REt)
- ColorSmart on 560C only
- 3 pages per minute in black
- 6 built-in typefaces, plus 14 TrueType scalable fonts for Windows
- Automatic envelope sensor

APPLE

PowerPC™ Power Macintosh

- Power Mac 6100/60 8/160
- PowerPC™ 601
- Risc processor
- 60Mhz/32K cache
- 8MB RAM expandable to 72MB
- 160MB HD, 1.44Mb Super Drive
- Runs PC Windows with SoftWindows

$1599

Apple

Power Macintosh 6100/60, 8/250 w/CD	$2119
Power Macintosh 6100/60, 16/250 Softwind	$2349
Power Macintosh 7100/66, 8/250CD	$2949
Power Macintosh 8100/80, 8/250	$3849
PowerBook® 520/540	$Best Price
Apple® Macintosh Quadra® 950	$Best Price
PowerBook® Duo 250 12/200 w/modem	$2388
PowerBook® Duo 270C 12/240 w/modem	$3175
Personal LaserWriter 320	$875
LaserWriter Select 360	$1465
Apple® Power CD	$389
Apple® Multimedia Kit	$594

SUPER SPECIAL SALE

HP Omni 300 (Blowout)	$699
PowerBook® 165 4/80	$1399
PowerBook® 165 4/160	$1499
Apple® Audiovision 14" display	$599
Maxtor 545MB IDE Hard Drive	$379
Maxtor 345MB IDE Hard Drive	$269
14.4/14.4 Fax modem Int.	$89

Limited Quantity

Everything Must Go

Apple, the Apple logo, Macintosh, StyleWriter, and LaserWriter are registered trademarks of Apple Computer, Inc. PowerBook, Macintosh Quadra, and PowerBook Duo are trademarks of Apple Computer, Inc. Classic is licensed to Apple Computer Inc.

SYSTEMS

486DX VESA LOCAL BUS SYSTEM

486DX-33MHz	**$1229**
486DX2-66MHz	**$1299**
Pentium Ready Board	**Add $50**

- Intel CPU w/8K int. cache & math coprocessor
- 128K ultra fast external cache
- 4MB RAM (Exp. 32MB)
- 1.2MB & 1.44MB floppy drives
- 345MB IDE Hard Drive
- 2H/2F IDE controller (2S, 1P & 1G)
- VLB SVGA card w/1M (2M max)
- 14" Full Screen SVGA Non-Interlaced Monitor (1024x768) .28dp
- 101 Enhanced Keyboard/Mouse
- Mini Tower Case w/LED Display

INTEL 486SX-25 COMPLETE SYSTEM

$949

- Intel 486SX-25MHz CPU
- 8K of internal cache
- 4MB Memory
- 1.2MB & 1.44MB Floppy Drives
- 210MB IDE Hard Drive
- 1:1 2H/2FIDE Controller
- Clock/Calendar
- 2 Serial, 1 Parallel, 1 Game Port
- 16-Bit SVGA Card (1024x768) w/512K
- 14" Super VGA Monitor (1024x768) .28 Dot
- 101 Enhanced Keyboard.
- Mouse
- Mini Tower w/PS

Super System for Beginners

MULTIMEDIA KIT $299

- Panasonic CD ROM
- 16 Bit Sound Card
- Speakers
- 6 CD Titles

CD ROM DRIVES

Toshiba	
3401B 200ms	$349
3401E 200ms	$499
NEC	
CDR 500 3Xi Int. Triple Speed 200ms	$449
CDR 500 3Xe Ext. Triple Speed 200ms	$479
TEXEL	
302	Call
PANASONIC Double Speed Int. w/Adapter	$199
SONY Double Speed 33A w/adapter	$199

SOUND CARDS

Audio Plus	Call
Sound Blaster Pro	Call
Sound Blaster 16	Call
Sound Blaster 16 ASP	Call
Sound Blaster 16 ASP w/SCSI	Call

MOTHERBOARDS

386DX-40MHz 128K W/CPU	$120
486SX-25MHZ W/CPU	$165
VESA LB 486SX-25MHZ 128K W/Intel CPU	$189
VESA LB 486SX-33MHZ 128K W/Intel CPU	$239
Pentium 586-66MHz 256K w/Intel CPU	$1099
Pentium 586-90MHz Dual Processor 256K w/Intel CPU	$1499
VESA LB 486DX-33MHz 128K w/Intel CPU	$369
VESA LB 486DX-50MHz 128K w/Intel CPU	$439
VESA LB 486DX2-66MHz 128K w/Intel CPU	$449
IBM 486SLC2-66 VLB MB w/CPU, Math Chip & heat Sink	$305

MODEMS

Intel 14.4/14.4 Int/Ext.	$139/169
Boca 14.4/14.4 Int/Ext.	$129/159
US Robotics 14.4/14.4 Fax/Data Int.	135
US Robotics 14.4/14.4 Fax/Data Ext.	169

TAPE BACKUPS

Colorado DJ20 250MB	$170
IOMEGA 250	239

Comart is an Authorized Reseller & Service Center for The Following: HP • Apple • Oki • Compaq • Epson • Novell • IBM

ADVERTISERS INDEX

A T & T 56
A&A TECHNOLOGY 77
ACCESS COMPUTER TECHNOLOGIES 150-165
ACME MICRO-SYSTEMS 59
AIM COMPUTERS 124
ALPHA CD IMAGING 274
ALPHA FINE COMPUTER FURNITURE . 348
ALTIMA SYSTEMS 14
AMERICAN COMPUTER RESEARCH ... 117
AMERICAN EXPOSITIONS 281
AMERICAN MULTI SYSTEMS 10
AMT INTERNATIONAL 126,127
ANJON & ASSOCIATES 282
ARM COMPUTER, INC. 49
AROMA TECH, INC. 122,123
ART COMPUTER INC. 131
ASA COMPUTERS 55,134-137
ASP COMPUTER PRODUCTS 310
AUTHORIZED TECHNICAL SERVICES .. 330
AUTO EXEC COMPUTER 316
AVISION LABS, INC. 51
BACKYARD COMPUTER SERVICES 78
BAY COMPUTER 321
BCSA COMPUTERS 71
BELMONT SYSTEMS, INC. 120,121
BEST DATA SYSTEMS 285
BETA NINETIES COMPUTER 19
BIG BANG TECH. 100
BINARI STAR INTERNATIONAL 18
BINARY INFORMATION SYSTEMS 45
BLACK FEATHER ELECTRONICS 260
BOLD DATA TECHNOLOGY 95
C & J COMPUTERS, INC. 133
C.B. MEMORY & COMPUTERS 324
C.G.I. TECHNOLOGY 284
CARDSERVICE INTERNATIONAL 254
CENTRAL COMPUTER SYSTEMS .. 262-268
CERTIFIED NETWORK EDUCATORS 78
CHICOTEC 312,313
CITY COMPUTERS, INC. 116
CLARITY TECHNOLOGIES 74
COMART BUSINESS SYSTEMS 347
COMET MICRO SYSTEMS 125
COMMAND LINE COMPUTER 7
COMMAX TECHNOLOGIES 105
COMP EXPRESS 33
COMPU DATA 103
COMPU X USA 322
COMPUMART 169
COMPUTER CARE 84
COMPUTER LINK 279
COMPUTER STORE, THE 79
COMPUTERLAND OF HAYWARD 48
COMPUTERLAND OF SERRAMONTE ... 23
COMPUTOWN 80,81
COMTEK COMPUTERS 319
CORPORATE SYSTEMS CENTER 15
CUPERTINO COMPUTER 60
CYPRESS COMPUTERS 141
DISK DRIVE DEPOT 3
DOMINO COMPUTER 9
DSI TECHNOLOGIES 325
EFI'S DISCOUNT COMPUTER 18
ELECTRO INTEGRATED TECHNOLOGY . 115
ELMA ELECTRONICS 8
EVERGREEN COMPUTER INT'L ... 332,333
EVERNET EDUCATION SERVICES 86
EXCEL MICRO SOLUTIONS 260
FASTLINK NETWORK PRODUCTS 111
FRED HANEY COMPUTERS 331
FRY'S ELECTRONICS 2,175-205,351
GENERAL MICRO 249
GENERAL SOFTWARE 56
GIGABYTES 298,316
GMI, INC. 69
GOLDEN MICRO COMPUTER 309
GRAND MICRO TECHNOLOGY 46
GRANITE - DIGITAL 50
H D SYSTEMS 34-43
HALTED SPECIALTIES 315
HAMILTON MULTIMEDIA SYSTEMS 287
HI-TECH USA 170,171
HIQUALITY SYSTEMS, INC. 63-67
HITRON SYSTEMS 24,25
HKG COMPUTERS 271
INPUT AUTOMATION 304
INTELESYS 26,27
INTELLIGENT NOTEBOOK SYSTEMS ... 101
INTERNATIONAL MODULE DESIGN 298
INTERPRO MICRO SYSTEMS 91
IQ INFOQUEST COMPUTER 106,107
ISC COMPUTERS 167
ITS CD 8
J & K TECHNOLOGIES 30
JDR MICRODEVICES 75
JEMINI ELECTRONICS 292,293
JIS MICRO TECHNOLOGY 109
JONES COMMUNICATION 73
KENSAI INTERNATIONAL 14
KINGSTAR COMPUTER 21
KONICOM 20
LAITRON COMPUTER 305-307
LAP-TOP SUPERSTORE 83
LCI 308
LEGEND COMPUTER 29
LIBRE SERVICES COMPUTER, INC. 31
LINDEN MICROTECH 142,143
LTI LEOPARD TECHNOLOGIES 283
M.A.C. 139
MARKET PRO 210
MCT, MULTI CONNECTION TECH. 98
MCTEK SYSTEMS 317
MDS COMPUTERS 12,13
MERCURY COMPUTERS 334-335
MERCURY CENTER 272,331
MIRACLE COMPUTER 277
MIS SERVICES 54
MULTI MICRO SYSTEMS 259
NCA COMPUTER PRODUCTS 213-247
NET USA 320
NETIS 275
NETWORK ASSOCIATES CORP. 323
NORDIC COMPUTERS 349
NOVACOR, INC. 251
NOW ELECTRONICS 288,289
NUMBER NINE COMPUTER CORP. 57
OS+ RESOURCE 286
PALO ALTO MICRO 86
PARADINE COMPUTER SYSTEMS . 344-345
PARAMOUNT COMPUTER 47
PARS INTERNATIONAL COMPUTER ... 209
PAULUS COMPUTER 50
PC WAREHOUSE 102
PIXEL USA COMPUTER 294-297
PORT CHICAGO'S LOADING DOCK 260
POSITIVE SOLUTIONS CORP. 273
PRESTIGE COMPUTER 112,113
PRINTER WORKS 16
PROMOX SYSTEMS 301
QUARTERDECK OFFICE SYSTEMS 352
R-COMPUTER 173
RAINBOW COMPUTER 253
REFFKO, INC. 61
ROBERT AUSTIN CORP. 85
SAN DIEGO COMPUTER FAIR 329
SCHWAB COMPUTER CENTER 130
SCSI WORKS COMPUTER PRODUCTS ... 89
SEYBOLD SEMINARS 255
SIGMA COM. 70
SONGTECH INTERNATIONAL, INC. 311
SONIC COMPUTER 119
SOUND MIND TECHNOLOGIES 274
SPIDER GRAPHICS 128,129
STORAGE SYSTEMS ENGINEERING 314
SUSHI DEPOT RESTAURANT 322
SYMPHONY COMPUTER 96,97
SYSTEMS UNLIMITED 114
TECHNOLAND 207
TOP DATA 72
TOWER COMPUTER 149
TRADE TEK 348
TRUECOMP AMERICA, INC. 294-297
UMIRACLE MICROSYSTEMS 144-147
UNITED MICROSYSTEM, INC. 299
UNIVERSAL COMPUTER PRODUCTS .. 132
USM DISTRIBUTORS 256,257
VANISHED CHILDREN'S ALLIANCE 343
WALNUT CREEK CDROM 274
WEDGE TECHNOLOGY 334,335
WHOLE EARTH ACCESS 4,5
WINNER'S CIRCLE 53
WIT INTERNATIONAL 261
WORLD-NET MICROSYSTEMS 326,327

This index is provided as an additional service. Although we do our best to maintain accuracy, the publisher does not assume liability for errors or omissions.

TRADE TEK 1•800•238•4453

HARD DRIVE WAREHOUSE

234 CARABEAN DR. SUNNYVALE CA, 94089
(408) 744-1611, FAX (408) 747-0954

HDD
RUN OUT OF CAPACITY?
NO INSTALLATION
EXTERNAL HI-SPEED SYSTEM
SUBSYSTEM
1.0GB $875
1.7GB $999

540MB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Conner	540A IDE	12ms	3.5"LP	$325/425
Conner	540S SCSI	12ms	3.5"LP	$325/425
Fujitsu	2684 IDE	12ms	3.5"LP	$325/425
Maxtor	7546 IDE	12ms	3.5"LP	$325/425
Maxtor	7546 SCSI	12ms	3.5"LP	$325/425
Quantum	540A IDE	12ms	3.5"LP	$325/425
Quantum	540A SCSI	12ms	3.5"LP	$325/425
Seagate	3655 IDE	12ms	3.5"LP	$325/425
Seagate	3610 SCSI	12ms	3.5"LP	$325/425
WD	540 IDE	12ms	3.5"LP	$325/425

1.0GB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Conner	1060S SCSI	10ms	3.5"LP	$635/735
Conner	1080 IDE	10ms	3.5"LP	$635/735
Fujitsu	2694 SCSI	10ms	3.5"HH	$635/735
Micropolis	4410 SCSI	10ms	3.5"LP	$635/735
Micropolis	4410A IDE	10ms	3.5"LP	$635/735
Micropolis	4410AV SCSI	10ms	3.5"LP	$735/835
Quantum	1080S SCSI	10ms	3.5"LP	$635/735
Seagate	31200N SCSI	10ms	3.5"LP	$635/735
WD	31000 IDE	10ms	3.5"LP	$325/425

CALL FOR LOWEST CD-ROM & SOUND CARD PRICES!

NOTE:
IDE EXTERNAL DRIVES plug into PRINTER PORT and play. ALL DRIVES are SCSI EXCEPT noted as IDE.
CALL for prices on OTHER MODELS. SPECIAL PRICES for SMALL CAPACITY IDE DRIVES.

1.7GB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Micropolis	2217 SCSI	10MS	3.5"HH	$875/975
Micropolis	2217AV SCSI	10MS	3.5"HH	$945/1045
Micropolis	2217A IDE	10MS	3.5"HH	$875/975

2.0GB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Conner	2120S SCSI	10ms	3.5"HH	$995/1095
DEC	5200S SCSI	12ms	5.25"FH	$995/1095
DEC	3210S SCSI	10ms	3.5"HH	$1200/1300
Micropolis	1924 SCSI	10ms	5.25"FH	$1200/1300
Micropolis	1926 SCSI	10ms	5.25"FH	$1300/1400
Seagate	1255N SCSI	8ms	3.5"HH	$1450/1550

3.0GB

MAKE	MODEL	SPEED	SIZE	INT/EXT
Micropolis	1936 SCSI	10ms	5.25"FH	$1990/2000
Seagate	4300N SCSI	8ms	5.25"FH	$2100/2200

4.0GB

DEC	5400S SCSI	12ms	5.25"FH	$2400/2500

9.0GB

Seagate	410800N SCSI	12ms	5.25"FH	$4400/4500

SCSI CONTROLLERS

ADAPTEC	
1542E, ISA	$195
2842, VESA	$275
2742, EISA	$375
FUTURE DOMAIN	
1670, ISA	$95
ALWAYS	
7084, VESA	$259

SUPER VGA MONITORS

SIZE	MAKE/MODEL	PRICE
14"	ARX	$220
17"	Viewsonic V7	$599
17"	Artscan	$525

TAPE DRIVES

CAPACITY	MAKE/INTERFACE	INTERNAL/EXTERNAL
120MB	Colorado, QIC80	$140/290
250MB	Colorado, QIC80	$175/375
250MB	Archive, SCSI	$345/545
250MB	Wang Dat, SCSI	$400/600
525MB	Archive, SCSI	$540/740
525MB	Wang Dat, SCSI	$540/740
2GB	Wang Dat, SCSI	$750/950
4GB	Wang Dat, SCSI	$950/1150
16GB	Wang Dat, SCSI	$1150/1350

- SUMMER SPECIALS GOOD THRU 9/19!
- GOVERNMENT & CORPORATE PO's ARE ACCEPTED
- NO SURCHARGE FOR CREDIT CARDS
- SAME DAY SHIPPING ON MOST ORDERS
- RETURNS NEED TO HAVE RMA#'s
- SHIPPING AND HANDLING CHARGES ARE NOT REFUNDABLE

MasterCard VISA

Our #1 Ergonomic Chair for the Home Office!

- Three Separate Back Adjustments
- Gas-Lift or Manual Seat Height
- Steel Base with Wood Cap
- Contract-Grade Fabric

ALPHA
FINE COMPUTER FURNITURE

(510) 930-0277 • (800) 974-0277
OPEN M-F 9:30-5:30, SAT 10-5 • 2241 N. Main, Walnut Creek

Lifetime In-Store Labor Warranty On Parts

WHERE EXCELLENCE IS A NINE YEAR TRADITION!

OVER 20,000 SYSTEMS SOLD

NORDIC COMPUTERS

GREAT PRICE

486DX2-66 VESA LOCAL BUS SYSTEM

w/Hard Drive & Super VGA Monitor

486DX2-66, 3VLB Slots 256K Cache
4 MB RAM, 70ns
IDE Hard Drive & VLB Controller
Viewsonic 4E SVGA Monitor (.28dp)
VLB SVGA Card w/1MB
Teac 1.44 Floppy Drive
2 Serial, 1 Parallel Port
Maxiswitch or Keytronic Keyboard
Medium Tower Case
DOS 6.22 w/Manual
Cooling Kit
Lifetime Labor Warranty, 1 yr. parts

SVGA 340MB	SVGA 540MB
$1449	$1579

Walnut Creek Store NOW OPEN

STOP BY AND RECEIVE A FREE MOUSE PAD

Enter our Drawing for these exciting products:

-MS Mouse
-Noise Killer
-Compton's Interactive Encyclopedia and More!

Enter by Sept. 15th to Win

Multimedia UPGRADES

- Double Speed CD-ROM
- 16 Bit Sound Card
- Shielded PC Speakers
- Interactive Encyclopedia and Other Titles

$324

NOISE KILLER

NOISE

Makes your system quiet! **$39**

NOTEBOOKS • NETWORK HARDWARE • PENTIUM SYSTEM

486-33 System

VESA LOCAL BUS

33MHz, 3VLB Slots
4 MB RAM, 70ns
IDE Hard Drive
Viewsonic 4E SVGA Monitor
Teac 1.44MB Drive
2 Serial/1 Parallel Port
Enhanced Keyboard
DOS 6.22 with manual
Lifetime Labor Warranty, 1 yr. parts

SVGA 340MB	SVGA 540MB
$1399	$1499

486SX-33 System

VESA LOCAL BUS

33MHz, 3VLB Slots
4MB RAM, 70ns
IDE Hard Drive
Viewsonic 4E SVGA Monitor
Teac 1.44 MB Drive
Enhanced Keyboard
2 Serial, 1 Parallel Port
DOS 6.22 with manual
Lifetime Labor Warranty, 1 yr. parts

SVGA 340MB	SVGA 540MB
$1249	$1349

386-40 System

w/Hard Drive & Monitor

40MHz (Upgradable Board)
4 MB RAM, 70ns
IDE Hard Drive
Super VGA Monitor
1.44 Drive
2 Serial/1 Parallel Port
Enhanced Keyboard
DOS 6.22 with manual
Lifetime Labor Warranty, 1 yr. parts

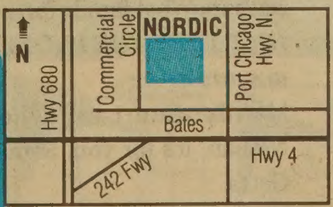
MVGA 210MB	SVGA 210MB
$899	$1049

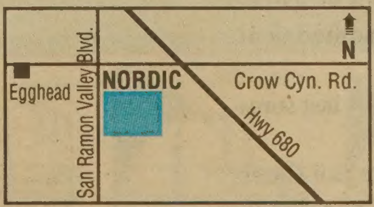
System Add-Ons

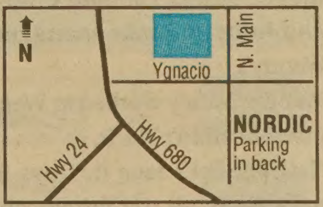
14.4/14.4 Fax/Modem	$119
Serial Mouse	$29
Additional Memory, per MB	CALL
Genoa VLB 1MB Video Card	$110
Noise Killer	SALE $39

System Upgrades Low Prices and Quick Service

NORDIC COMPUTERS







VISA

Prices subject to change without notice.
Dealer inquiries welcome.

MasterCard

CONCORD
560 Commercial Cir., Unit A
Concord, CA 94520
(510) 687-3050
M-F 9-6 Thur till 7:30 Sat 11-4

SAN RAMON
2438 San Ramon Valley Blvd.
San Ramon, CA 94583
(510) 743-9390
M-F 9-6 Sat 10:00-4:00

WALNUT CREEK
1987 North Main
Walnut Creek, CA 94596
Parking in back
(510) 687-3173
M-F 9-6 SAT 10-4

DVORAK'S LAST COLUMN • BY JOHN C. DVORAK

DWEEB!

A Musical Comedy

The following *is an excerpt of John C. Dvorak's new musical comedy,* DWEEB!, *which will begin auditions for a San Francisco appearance before continuing to Broadway next spring. It's about Nathan Gottlieb, boy genius. Nathan is derided as a dweeb by what few friends he has. Nobody likes him until the end when Nathan saves the town of Mallet, PA, from destruction. In this scene, Nathan, sixteen, laments his choices in life with his cheerleader girlfriend.*

> **Let's face it. Guys like Bill Gates have taken all the money and hoarded it. There's only so much money and some guys have too much.**

Nathan: [*sitting at table reading the want ads*] Gosh, Mandy, what am I going to do this summer. I need a job.

Mandy: [*sitting on floor playing jacks*] Oh Nathan, why do you want to work at all? You're a really, really good genius. Shouldn't you be just sitting and thinking of stuff? I mean, like, can't your parents give you money?

Nathan: [*putting paper down*] No! I want to make something of my life. I want to be like Bill Gates, you know. He's the best guy in the world. I mean he's rich and doesn't even care!

Mandy: Who?

Nathan: Bill Gates the ba-jillionaire? Did you know he wanted to change his name from Bill to Billion? That's how rich he is. He can change his name. Boy, I wish I could change my name. Nathan. My name sucks. I'll never get rich with a name like that. Maybe I should just call Wendy's and see if they're hiring. I should drop out of school and hope to make manager someday at Wendy's.

Mandy: Nancy worked at Wendy's last summer. She didn't like it.

Nathan: Let's face it. Guys like Bill Gates have taken all the money and hoarded it. There's only so much money and some guys have too much. Something should be done. I think it's time for a redistribution of wealth. We need a bloody revolution in this country to set things straight.

Mandy: Actually it was Kimberly who worked at Wendy's. That's right, Kimber. She hated it.

Nathan: Mandy, are you listening to anything I'm saying?

Mandy: Of course. Bill Gates is a guy with money and you want to revolt. Count me out. I'm decidedly nonviolent. Too messy. And why all this talk about Wendy's? Why aren't you programming your computer? You're supposed to be this computer wizard. Why aren't you programming or whatever it is you do to the thing. I'm only going steady with you because you're the smartest guy in school. Show yourself off more. Your brains, I mean.

Nathan: You know, I've been meaning to ask you. Why is the cutest cheerleader in school going out with a guy...uh, uh....a...

Mandy: A dweeb?

Nathan: Yes, a dweeb. A dweeb like me! All the other girls are going with the football players. Except you. You're the homecoming queen and voted most likely to succeed.

Mandy: And most likely to marry a rich man. You're the only one in this school with potential, Nathan. I mean, once you inherit the family fortune we can cruise the world. I'll dress you right, so don't worry.

Nathan: The family fortune? What gave you the impression that I'll inherit the family fortune. What family fortune?

Mandy: What do you mean? Isn't that what you do on the computer, work on the family fortune?

Nathan: What family fortune?

JUST THEN THE PHONE RINGS—Mandy answers it.

Mandy: Can I say who's calling? OK. Nathan, it's for you. Some guy named Bill Gates.

Nathan: Wow! [*grabs phone*] Hullo...M-M-M-Mister Gates. Thanks for calling. Did you see the program I sent?

Gates [*on phone*]: Yes, I did. It's an amazing piece of work. We'd like to incorporate it in our updated release of Chicago. We think it will be critical to the success of the upgrade.

Nathan: Updated Chicago? What is that? I thought Chicago was delayed.

Gates [*on phone*]: Yes, well, we're working on the update to the unreleased version. We love to think ahead. I'll pay you $50 for the utility.

Nathan: What?

Gates [*on phone*]: I mean $50,000. Did I say $50? I meant $50,000.

Nathan: I thought it was critical. Isn't $50,000 a little low?

Gates [*on phone*]: Why you pipsqueak, who do you think you're talking too? You're a sixteen-year-old numnuts. I'll give you $250,000 and that's my last offer.

Nathan: Well, I...be—

Gates [*on phone*]: IBM? IBM what? Are they aware of this? Those bastards. I'll sink them. OS/2 is dead! Dead I tell you! Shout it from the mountains. OS/2 is D-E-A-D! Nobody, I mean nobody beats Bill Gates! I'll give you five million for the product and a job in the company. Stock too!

Nathan: Well...

Gates [*on phone*]: What is it that you want? More?

Nathan: A ride in the Porsche! Plus the five mil, of course.

Gates [*on phone*]: Deal! You'll have a check in the morning. Report to work on Monday 4 am sharp. [*CLICK!*]

Nathan: Cool. [*turning to Mandy*] So what were we talking about?

Mandy: Your family fortune!

Nathan: What family fortune?

Mandy: The hot dog company, silly.

Nathan: What hot dog company?

Mandy: Nathan's.

Nathan: We don't own Nathan's!

Mandy: You creep. [*slaps him*] Stringing me along! I'm outta here. Loser! Dweeb!

She stomps out.

Nathan [*to himself*]: Cool. Bill Gates actually called *me*!

Scene finishes with Nathan breaking into the song "BILL!" end of scene 10. ■

HEWLETT PACKARD

SAVINGS HEADQUARTERS

FRY'S and HP KNOW HOW TO MAKE WAVES!!!

HEWLETT PACKARD
Authorized Dealer

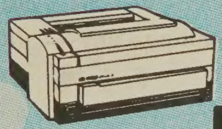
DeskJet 520 Inkjet Printer

Clear, sharp, professional-quality black output with 600 x 300 dpi black printing, HP's Resolution Enhancement Technology for smooth, crisp characters, fast text printing at up to 3 ppm, 256 levels of grayscale, energy efficient, and has a three year limited warranty.
#1888519

$276.99

HEWLETT PACKARD
Authorized Dealer

LaserJet 4L



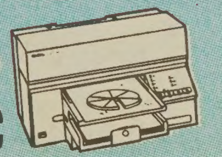
- 26 built-in scalable typefaces let you shrink and enlarge type to thousands of sizes.
- 300 DPI Laser printing with HP Resolution Enhancement Technology and microfine toner for smooth, sharp text and graphics.
- 1MB standard memory with Memory Enhancement Technology effectively doubles your printer memory.

#1786963

$639.95

HEWLETT PACKARD
Authorized Dealer

DeskJet 1200C



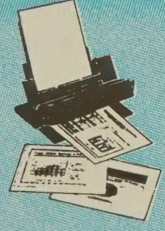
- 600 x 300 dpi black text at up to 7 pages per minute produces high-quality output at business speed.
- 300 dpi color at 1 to 2 minutes per page creates fast, high-quality output with bold, brilliant colors and true black.
- Plain-paper printing for both black and color saves money and allows convenient use of common office paper stationery.
- Built-in high-speed Centronics interface and optional HP JetDirect cards provide powerful, flexible connectivity.

#1786974

CALL FOR BEST PRICE

HEWLETT PACKARD
Authorized Dealer

DeskJet 310



HP and Fry's now offer color you can carry with you.

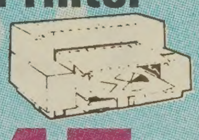
- Professional-quality 300 dpi printing in black- (optional color sold separately).
- Light and compact for printing on the go.
- Great printing companion for your notebook PC.
- Fast- up to 3 ppm print speed.
- Includes lightweight, multi-voltage power adapter.
- Prints on plain paper, transparencies, and labels.

#1842038

$299

HEWLETT PACKARD
Authorized Dealer

DeskJet 500C Color InkJet Printer

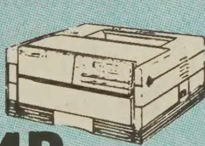


COLOR INKJET OUTPUT AT 300 DPI!
Prints in Color or Black and White
100 Sheet Paper Feeder
Whisper Quiet
3 Year Warranty
#1632480

$345

HEWLETT PACKARD
Authorized Dealer

LaserJet 4P

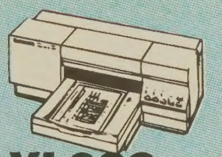


True 600 x 600 dpi printing for four times the resolution of conventional 300dpi printers • HP Microfine toner and Resolution Enhancement Technology for smoother, sharper graphics • Uses 50-70% less energy than comparable laser printers in Powersave mode • Prints on a wide range of paper sizes and types including mailing lables, postcards, envelopes and index cards Enhanced HP PCL 5 for seamless compatibility with the HP LaserJet 4 printer • 45 built-in scalable typefaces • 2MB standard memory, expandable to 26MB.
#1842050

$939.99

HEWLETT PACKARD
Authorized Dealer

Color PaintJet XL300 Color Graphics Ink Jet Printer



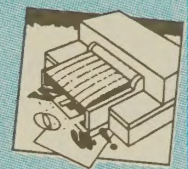
- 300 DPI Plain Paper
- 200 CPS NLQ
- Prints on Transparency Film & Paper
- 360 Colors addressable, over 16.5 million color available

#1688986

$2199.99

HEWLETT PACKARD
Authorized Dealer

DeskJet 560C Color Inkjet Printer

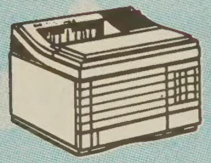


Outstanding print quality in black and color. This clear, sharp, professional quality printer with 600 x 300 dpi black output has HP's Resolution Enhancement Technology for smooth, crisp characters, fast text printing at up to 3 ppm for black and 4 mpp for color, 256 levels of grayscale, is energy efficient, and has a three year limited warranty.
#1888542

$549.99

HEWLETT PACKARD
Authorized Dealer

LaserJet 4 Plus



The BEST print quality in the industry

- 12 pages per minute engine and 25MHz RISC processor for faster printing
- True 600 dpi print quality for clear, crisp text and graphics
- Resolution Enhancement Technology and microfine toner for superior output quality
- Easy to set up and use
- Duplex option (sold separately)

#1908697

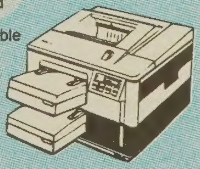
$1397

HEWLETT PACKARD
Authorized Dealer

LaserJet 4Si

- Expandable and flexible, excellent for networks
- Fastest HP LaserJet printer at 17 ppm
- Multiple language capability with auto switching
- True 600 x 600 dpi printing with REt and microfine toner
- 75,000 page/ month duty cycle and flexible paper-handling
- HP quality and reliability

#1779583



$2995

HOME OF FAST, FRIENDLY, COURTEOUS SERVICE!

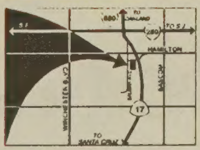
Fry's ELECTRONICS

Prices Good Through September 13, 1994

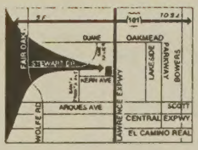
Limit Rights Reserved.
Not Responsible for Typographical Errors.

STORE HOURS
MONDAY - FRIDAY
8AM-9PM
SATURDAY
9AM - 8PM
SUNDAY
9AM - 7PM

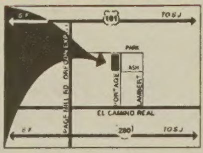
CORPORATE P.O. FAX #



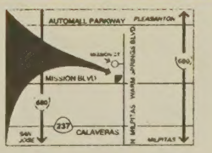
Campbell
600 E. Hamilton Ave.
(408) 364-3700
(408) 364-3595



Sunnyvale
1177 Kern Ave.
(408) 733-1770
(408) 735-6800



Palo Alto
340 Portage Road
(415) 496-6000
(415) 496-6044

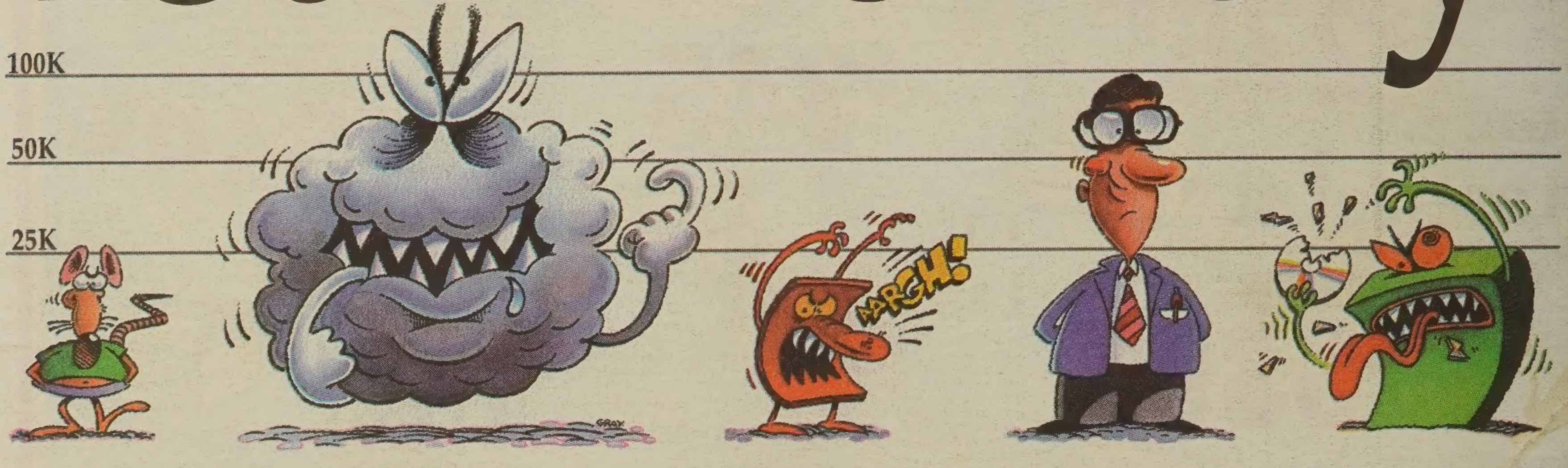


Fremont
440 Mission Ct.
(510) 770-FRYS (3797)
(510) 770-3700

VISA
MasterCard

Visa and MasterCard Accepted

What's Eating Your Memory?


100K
50K
25K
AARGH!
GROX
Mouse Driver—up to 25K
Network Drivers —up to 150K
Sound Card Driver—up to 25K
DOS 6 Utilities —up to 100K
CD ROM Drivers —up to 50K

Memory munchers lurk in your system.

They consume memory your DOS programs need to work smoothly, or even to load at all—whether they run in Windows or from the DOS prompt.

When You Lose Memory, You Lose Power

When you install new hardware or software, haven't you wondered where all your memory goes? Or why things start to slow down?

Beep! Not enough memory to run. Beep! General Protection Fault! Beep! Crash. Things are getting a little unpredictable. What's happening to your computer? What can you do?

If You Need It, You Have to Feed It

Software drivers all take a bite out of your 0-640K memory area; and if they eat too much, your applications will grow sluggish or even refuse to run at all.

But drivers are necessary for all the things you want to use: most programs talk to a mouse driver, not to the mouse itself; a CD-ROM drive needs one so that DOS can recognize it. A sound card usually needs a driver for applications to talk to, and so on.

The more you want from your PC, the more mouths you'll need to feed.

Get it All Back—and More

QEMM 7 delivers as much conventional (below 640K) memory area as possible by relocating these hungry drivers into vacant memory space above 640K. That frees up the area in conventional memory that drivers were stealing. Memory needed by games, data bases, and other programs. You could find yourself with a bonus 250K that you never knew you had!

QEMM 7—the Safe, Fool-proof Solution

Nothing could be simpler than installing QEMM. It automatically calculates millions of memory configurations in minutes to make sure that your PC's memory is at its optimum. And that ensures your software will run its best.

QEMM 7 employs its patented Stealth™ and DOS-UP™ technology to give 8K-24K below 640K for best Windows performance, load the DOS SHARE program used by Windows OLE, install a mouse, sound card, CD-ROM and a network... and still have more than 630K! No wonder QEMM outsells all the other memory managers put together!

See your software dealer today or call (800) 571-4860 to find out how QEMM protects your memory and your productivity.

Quarterdeck

CompUSA
Santa Clara (408) 554-1733
San Bruno (415) 244-4700

Fry's
Palo Alto (415) 496-6000
Fremont (510) 770-3797

Software Etc.
Fairfield (707) 428-6121
San Jose (408) 281-0872

Electronics Boutique
San Francisco (415) 564-7567
Concord (510) 682-5449

800 SOFTWARE
Richmond (800) 888-4880

©1994 Quarterdeck Office Systems. Trademarks are property of their respective owners.